

GARDY & NOTIS, LLP

Mark C. Gardy
James S. Notis (*pro hac vice*)
Orin Kurtz (*pro hac vice*)
560 Sylvan Avenue
Englewood Cliffs, New Jersey 07632
Tel: 201-567-7377
Fax: 201-567-7337

GRANT & EISENHOFER P.A.

James J. Sabella (*pro hac vice*)
Diane Zilka (*pro hac vice*)
Kyle McGee (*pro hac vice*)
485 Lexington Avenue, 29th Floor
New York, New York 10017
Tel: 646-722-8500
Fax: 646-722-8501

REDACTED VERSION OF DOCUMENT
SOUGHT TO BE SEALED

BURSOR & FISHER, P.A.

L. Timothy Fisher (State Bar No. 191626)
1990 North California Boulevard, Suite 940
Walnut Creek, California 94596
Tel: 925-300-4455
Fax: 925-407-2700

Interim Co-Lead Counsel for the Class and Subclasses

[Additional counsel listed on signature page]

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION**

IN RE GOOGLE, INC. PRIVACY POLICY
LITIGATION

CASE NO. 12-CV-01382 PSG

**DECLARATION OF JAMES J.
SABELLA**

Date: June 9, 2015
Time: 10:00 a.m.
Courtroom: 5 – 4th Floor
Judge: Honorable Paul Singh Grewal

I, JAMES J. SABELLA, declare as follows:

1. I am an attorney admitted to practice before this Court *pro hac vice* in the above-captioned matter. I am a Director of the firm of Grant & Eisenhofer P.A., Co-Lead Interim Counsel for the Class and Subclasses. I submit this declaration in support of Plaintiffs'

1 Motion for Class Certification, Appointment of Class Representatives, and Appointment of
2 Class Counsel. I have personal knowledge of the facts set forth in this declaration, and if called
3 as a witness, could and would competently testify thereto under oath.

4 2. Attached as Exhibit A is a true and correct copy of the December 9, 2009
5 Google Checkout Privacy Policy.

6 3. Attached as Exhibit B is a true and correct copy of the November 16, 2011
7 Google Wallet Privacy Policy.

8 4. Attached as Exhibit C is a true and correct copy of the August 1, 2012 Google
9 Wallet Privacy Notice.

10 5. Attached as Exhibit D is a true and correct copy of the March 1, 2012 Google
11 Privacy Policy.

12 6. Attached as Exhibit E is a true and correct copy of a chart of Android App
13 Purchases by Plaintiff Michael Goldberg with production number GOLDBERG-000003.

14 7. Attached as Exhibit F is a true and correct copy of a chart of Android App
15 Purchases by Plaintiff Robert DeMars with production number DEMARS-000029.

16 8. Attached as Exhibit G is a true and correct copy of a chart of Android App
17 Purchases by Plaintiff Scott McCullough with production number MCCULLOUGH-0000001.

18 9. Attached as Exhibit H are excerpts from the deposition transcript of Ficus
19 Kirkpatrick.

20 10. Attached as Exhibit I are excerpts from the deposition transcript of Mark
21 Thomas.

22 11. Attached as Exhibit J is a true and correct copy of the expert report of C.
23 Matthew Curtin.

24 12. Attached as Exhibit K is a true and correct copy of the document with
25 production numbers GOOG-00000008-21.

26 13. Attached as Exhibit L is a true and correct copy of the expert report of Fernando
27 Torres.

28

1 14. Attached as Exhibit M is a true and correct copy of Defendant Google, Inc.'s
2 Responses and Objections to Plaintiffs' Third Set of Interrogatories.

3 15. Attached as Exhibit N is a true and correct copy of the firm resume of Grant &
4 Eisenhofer, P.A.

5 16. Attached as Exhibit O is a true and correct copy of the firm resume of Gardy &
6 Notis, LLP.

7 17. Attached as Exhibit P is a true and correct copy of the firm resume of Bursor &
8 Fisher, P.A.

9
10 I declare under penalty of perjury under the laws of the United States that the foregoing
11 is true and correct.

12
13 Dated: May 12, 2015

14
15 

16 _____
James J. Sabella

EXHIBIT A

Google checkout

[Google Home](#)[Google Terms of Service](#)[Previous Policies](#)

Google Checkout Privacy Policy

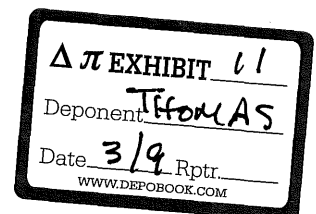
December 9, 2009

[\(View current privacy policy\)](#)

The [Google Privacy Policy](#) describes how we treat personal information when you use Google's products and services. In addition, the following describes our privacy practices that are specific to Google Checkout.

Information we collect and how we use it

- **Registration information** - When you sign up for Google Checkout, we ask for your personal information so that we can provide you with the service. If you register a credit or debit card, the information we require to register for the service includes your name, credit or debit card number, card expiration date, card verification number (CVN), address, phone number, and email address. If you register a Carrier Billing Account, the information that we require to register for the service includes your mobile telephone number, and the name and billing address associated with that number. For sellers, we also require you to provide your bank account number, and in some situations, your personal address, your business category, a government-issued identification number (for example, social security number or taxpayer identification number for U.S. residents), and certain information about your sales or transaction volume. This information allows us to process payments and protect users from fraud. In some cases, we may also ask you to send us additional information or to answer additional questions to help verify your information. The information we collect is stored in association with your [Google Account](#).
- **Information obtained from third parties** - In order to protect you from fraud or other misconduct, we may obtain information about you from third parties to verify the information you provide. For example, we may use card authorization and fraud screening services to verify that your credit or debit card information and address match the information that you provided to us. Also, for sellers, we may obtain information about you and your business from a credit bureau or a business information service such as Dun & Bradstreet. We also may obtain information from third parties in connection with providing Google Checkout to you, such as information from the Carrier in connection with Carrier Billing.
- **Transaction information** - When you use Google Checkout to conduct a transaction, we collect information about each transaction, including the transaction amount, a description provided by the seller of the goods or services being purchased, the names of the seller and buyer, and the type of payment used.
- **Information about your use of the service** - In order to protect you from fraud, phishing, and other misconduct, we may collect information about your interaction with the service to help validate your identity or detect potentially fraudulent conduct. For example, in some circumstances we may try to determine service usage patterns (such as how quickly you type) so that we can try to detect and prevent unauthorized attempts to access your account (such as automated hacking attacks, or the use of stolen usernames or passwords). Any such information we collect will only be used to detect and prevent fraud or other misconduct, unless you explicitly grant us permission to use it in another manner.
- **Google cookies** - When you access a Google Checkout webpage, we send one or more cookies - a small file containing a string of characters - to your computer that uniquely identifies your browser. We use cookies to improve the



Privacy Policy

Page 2 of 5

quality of our service by storing user preferences and tracking user trends. Most browsers are initially set up to accept cookies, but you can reset your browser to refuse all cookies or to indicate when a cookie is being sent. Please note that you will not be able to access Google Checkout if your cookies are disabled.

- **Log information** - When you use Google Checkout, our servers automatically record information that your browser sends whenever you visit a website. These server logs may include information such as your web request, Internet Protocol address, browser type, browser language, the date and time of your request and one or more cookies that may uniquely identify your browser.
- **User communications** - When you send email or other communication to us, we may retain those communications in order to process your inquiries, respond to your requests and improve our services.
- **Links** - We may present links in a format that enables us to keep track of whether these links have been followed. We use this information to improve the quality of our search technology, customized content and advertising. For more information about links and redirected URLs, please see our FAQs.

In addition to the above, we use the information we collect to:

- Provide our products and services to you, including the display of customized content and advertising;
- Perform auditing, research and analysis in order to maintain, protect and improve our services;
- Ensure the technical functioning of our network; and
- Develop new services.

We process personal information on our servers in the United States of America and in other countries. In some cases, we process personal information on a server outside your own country. We may process personal information to provide our own services. In some cases, we may process personal information on behalf of and according to the instructions of a third party, such as our advertising partners.

Information sharing

We will not sell or rent your personal information to companies or individuals outside of Google. If you are making a purchase through Google Checkout, we may share portions of your credit card number with the seller to identify the transaction, but we will not share your full credit card number with the seller without your opt-in consent, except in the limited circumstances described below. In addition, we will only share your personal information with other companies or individuals outside of Google in the following circumstances:

- As necessary to process your transaction and maintain your account. As with any credit card payment, if you process a credit card transaction through the service, we need to share some information (for example, your name and credit card number) with the banks and other entities in the financial system that process credit card transactions. For payment transactions processed through your Carrier Billing Account, we will need to share information with the Carrier holding your Carrier Billing Account in order to charge your Carrier Billing Account and for other purposes related to processing Carrier Billing transactions, such as purchases, reversals, refunds, adjustments, disputes and customer support. Some sellers require that their buyers provide a telephone number in order to process a transaction. In those cases, we will share your telephone number with the merchant, and you will be notified of that sharing before you complete your transaction.
- To detect, prevent, or otherwise address fraud, security or technical issues.
- We have your consent. We require opt-in consent for the sharing of any sensitive personal information.

- We provide such information to our subsidiaries, affiliated companies or other trusted businesses or persons for the purpose of processing personal information on our behalf. We require that these parties agree to process such information based on our instructions and in compliance with this Policy and any other appropriate confidentiality and security measures.
- We have a good faith belief that access, use, preservation or disclosure of such information is reasonably necessary to (a) satisfy any applicable law, regulation, legal process or enforceable governmental request, (b) enforce applicable Terms of Service, including investigation of potential violations thereof, (c) detect, prevent, or otherwise address fraud, security or technical issues, or (d) protect against imminent harm to the rights, property or safety of Google, its users or the public as required or permitted by law.
- If you are using a credit card issued by the merchant you are making a purchase from (a "private label credit card"), that merchant will receive your entire credit card number in association with your purchase.
- We may share aggregated non-personally identifiable information with third parties. For example, we may disclose that a certain percentage of our users have a billing address in a particular geographic area, or that a certain percentage of users use a particular type of credit or debit card. However, if we do share this aggregated information, we do not include personally identifiable information without your explicit opt-in consent or in the limited circumstances described above.

Google Checkout also gives you various choices regarding whether and how your email address is shared, on a seller-by-seller basis:

- When you shop at a seller for the first time and complete an order, you'll be given the option to keep your email address confidential. If you select to keep your email address confidential, Google will not share your email address with the seller, but will forward all communications from the seller to the address listed in your account. Please note, however, that if you decide to keep your email address confidential but have shared it with the seller in the past, that seller may associate the information they receive about you through Google Checkout with the information they've already received from you.
- You will also be given a choice on a seller-by-seller basis whether you'd like to receive promotional emails from the seller. If you decide later that you don't want to receive promotional emails from a seller, you will need to contact the seller directly.

If Google or its subsidiaries become involved in a merger, acquisition, or any form of sale of some or all of their assets, we will provide notice before personal information is transferred and becomes subject to a different privacy policy.

Information security

We take appropriate security measures to protect against unauthorized access to or unauthorized alteration, disclosure or destruction of data. These include internal reviews of our data collection, storage and processing practices and security measures, as well as physical and technical security measures to guard against unauthorized access to systems where we store personal data. For example, your credit card number will always be stored in an encrypted form (except when you provide it to us in a communication outside of our web page interface).

The security of your account also depends on keeping your account password confidential, and you should not share your account name or password with anyone. If you do share your account information with a third party, they will have access to your account and your personal information.

For more information about our security practices, please see the main [Google Privacy Policy](#).

Accessing and updating personal information

You can review and update your payment information by logging in to your Google Account and going to the "Purchase History" page, where you can update or remove your address and method of payment. You can also view your previous transaction history on the "Purchase History" page.

You can disable Google Checkout by [contacting us](#). If you do so, your payment information and transaction history will no longer be viewable through Google Checkout. However, in order to meet our reporting and auditing obligations, and to detect, deter, and prevent fraud or other misconduct on our systems, the information will be retained in our systems. If you disable Google Checkout, your personally identifiable information will not be used by Google or shared with third parties except for these purposes. We may delete these records over time if permitted or required by law.

Disabling Google Checkout does not close or cancel your Google Account. For more information about how to manage your Google Account preferences, please [click here](#). This Privacy Policy continues to apply to the personal information we maintain after you disable Google Checkout or close or cancel your Google Account.

Sharing Between Affiliates

We operate the Google Checkout service through wholly-owned subsidiaries of Google. For U.S. users, that subsidiary is Google Payment Corporation, and for European users that subsidiary is Google Payment Limited (based in the United Kingdom). For countries outside of the United States and Europe, please consult the terms of service made available to you within the service to learn more about the corporate entity offering the service.

The information we collect, including information obtained from third parties, is shared between Google Inc. and its subsidiaries to operate the service. Neither Google nor its subsidiaries will share your information with others except as described in this Privacy Policy.

We provide you with the right to opt out of certain sharing between Google and its subsidiaries. Specifically, you may choose to opt out of:

- The sharing between Google and its subsidiaries of information that does not pertain to your transactions or experiences with Google Checkout (also called "non-transactional information", e.g., information we may obtain from third parties to verify your identity), and
- The use by Google of information shared between Google and its subsidiaries to promote Google products and services.

Please remember, regardless of whether you choose to opt out of this sharing or not, we will never sell or rent your personal information, and we will not share your personal information with anyone outside of Google or its subsidiaries except as described in this Privacy Policy.

If you don't want us to share non-transactional data between Google and its subsidiaries, please click [here](#).

If you don't want us to use any information shared between Google and its subsidiaries to promote Google products and services to you, please click [here](#).

Web Beacons

Some of the merchants that accept Google Checkout use "web beacons" for the purposes of analyzing or auditing their website or transactions. A web beacon is an

electronic image in a web page, usually consisting of a single-pixel (1 x 1 GIF), that allows the website to analyze user traffic.

At the request of the merchant, we may serve web beacons on the merchant's behalf so that the merchant can analyze or audit their web traffic. We do not provide any personal information to merchants when serving web beacons on their behalf. In addition, we will provide you with a notice when a web beacon is served within Google Checkout. For more information on web beacons, click [here](#).

Changes to this policy

Please note that this Privacy Policy may change from time to time. We will not reduce your rights under this Policy without your explicit consent. We will post any Policy changes on this page and, if the changes are significant, we will provide a more prominent notice (including notification in your account interface or email notification). Each version of this Policy will be identified at the top of the page by its effective date, and we will also keep prior versions of this Privacy Policy in an archive for your review.

If you have any questions about this Policy, please feel free to contact us through our website or write to us at Privacy Matters, c/o Google Inc., 1600 Amphitheatre Parkway, Mountain View, California, 94043 USA.

Google and its subsidiaries adhere to the U.S. safe harbor privacy principles of Notice, Choice, Onward Transfer, Security, Data Integrity, Access and Enforcement, and are registered with the [U.S. Department of Commerce's safe harbor program](#).

©2010 Google - [Google Home](#)

EXHIBIT B


[Google Home](#)
[Google Terms of Service](#)
[Previous Policies](#)

Google Wallet Privacy Policy

November 16, 2011

The [Google Privacy Policy](#) describes how we treat personal information when you use Google's products and services. In addition, the following describes our privacy practices that are specific to the Google Wallet services provided by Google Inc. and its wholly-owned subsidiaries. Capitalized terms not defined in this Google Wallet Privacy Policy shall have the meaning ascribed to them in the [Google Wallet Terms of Service](#).

For detailed information about Google Wallet services please refer to the [Google Wallet Terms of Service](#).

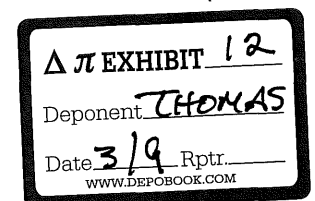
"Google Wallet" refers to the following Google payment services:

The Processing Service which allows the storage of payment instruments and processing of online payment transactions with participating merchants; and

Mobile Wallet which allows you to (i) make purchases at participating retail locations using an application on your smartphone with near-field communication ("NFC") capabilities (i.e., the Mobile Wallet Application); and (ii) make purchases on participating merchant websites from the mobile browser on your smart phone.

Information that we collect and how we use it

- **Registration information** - When you sign up for Google Wallet, we ask that you associate your Google Wallet account with a Google Account so that we can provide you with the service. If you register a Carrier Billing Account, the information that we require to register for the service includes your mobile telephone number, and the name and billing address associated with that number. For sellers, we also require you to provide your bank account number and, in some situations, your personal address, your business category, a government-issued identification number (for example, social security number or taxpayer identification number for US residents) and certain information about your sales or transaction volume. This information allows us to process payments and protect users from fraud. In some cases, we may also ask you to send us additional information or to answer additional questions to help verify your information. The information we collect is stored in association with your [Google Account](#).
- **Registration of a Payment Method** - If you store a payment method with Google Wallet, information that may be required includes, as applicable, your name, credit or debit card number, card expiration date, address, phone number, email address, date of birth and last four digits of Social Security number. This information may be stored on Google servers to synchronize your payment methods between the Mobile Wallet Application on your phone and the Processing Service. Data elements regarding card verification number (CVN) may be stored on the mobile device in encrypted form, but not on Google's servers. We may also receive information about the provisioning of the payment method to your device.
- **Information obtained from third parties** - In order to protect you from fraud or other misconduct, we may obtain information about you from third parties to verify the information you provide. For example,



we may use card authorization and fraud screening services to verify that your credit or debit card information and address match the information that you provided to us. Also, for sellers using the Processing Service, we may obtain information about you and your business from a credit bureau or a business information service such as Dun & Bradstreet. We also may obtain information from third parties in connection with providing Google Wallet to you, such as information arising from Google Wallet transactions at merchant locations and information from the Carrier in connection with Carrier Billing.

- **Transaction information** - When you use the Processing Service to conduct a transaction, we collect information about each transaction, including the transaction amount, a description provided by the seller of the goods or services being purchased, the names of the seller and buyer and the type of payment used. We may also collect transaction data from your use of the Mobile Wallet. For example, if you use the Mobile Wallet Application to make a purchase at a merchant or download a merchant coupon, we may obtain information regarding that transaction from the Mobile Wallet Application, from the merchant and/or a partner, as applicable. The information may include the date and time of the purchase, the store location, the amount of the purchase, and the offer associated with the transaction.
- **Information collected to prevent fraud** - In order to protect you from fraud, phishing and other misconduct, we may collect information about your interaction with the service to help validate your identity or detect potentially fraudulent conduct. For example, in some circumstances we may try to determine service usage patterns (such as how quickly you type) so that we can try to detect and prevent unauthorized attempts to access your account (such as automated hacking attacks or the use of stolen usernames or passwords). Any such information that we collect will only be used to detect and prevent fraud or other misconduct, unless you explicitly grant us permission to use it in another manner.
- **Information about your use of Google Wallet** - We may collect information about your interaction with the Mobile Wallet. This may include, for example, data on number of offers saved, payment attempts, and provisioning activity. Using added services may require your opt-in consent for Google Wallet to offer the functionality. For example, you may be offered the opportunity to opt-in to a service whereby Mobile Wallet would present offers to you based on your past transaction activities.
- **Offer information** - If you choose to clip and save an offer, we will collect the offer and provision it to the Mobile Wallet Application on your mobile device.
- **Google cookies** - When you access a Google Wallet through a browser, we send one or more cookies - a small file containing a string of characters - to your computer to uniquely identify your browser. We use cookies to improve the quality of our service by storing user preferences and tracking user trends. Most browsers are initially set up to accept cookies, but you can reset your browser to refuse all cookies or to indicate when a cookie is being sent. Please note that you will not be able to access certain features of Google Wallet if your cookies are disabled.
- **Log information** - When you use Google Wallet through a browser, our servers automatically record information that your browser sends whenever you visit a website. These server logs may include information such as your web request, Internet Protocol address,

browser type, browser language, the date and time of your request and one or more cookies that may uniquely identify your browser.

- **Device information** – When you use Google Wallet through a mobile device, we may collect information about your phone (including device and hardware IDs) for technical support and debugging purposes.
- **User communications** - When you send an email or other communication to us, we may retain those communications in order to process your enquiries, respond to your requests and improve our services.
- **Links** - We may present links in a format that enables us to keep track of whether these links have been followed. We use this information to improve the quality of our search technology, customized content and advertising. For more information about links and redirected URLs, please see our [FAQs](#).

In addition to the above, we use information that we collect to:

- Provide offers, coupons and other similar products to you for goods or services that may be provided by merchants, partners and other third parties alone or jointly with Google;
- To assist third parties in the provisions of products or services that you request from third parties, such as Third Party Provider Wallet Services described below;
- Provide our products and services to you, including the display of customized content and advertising;
- Perform auditing, research and analysis in order to maintain, protect and improve our services;
- Ensure the technical functioning of our network; and
- Develop new services.

We process personal information on our servers in the United States of America and in other countries. In some cases, we process personal information on a server outside your own country. We may process personal information to provide our own services. In some cases, we may process personal information on behalf of and according to the instructions of a third party, such as our advertising partners.

Use of Google Wallet At Third Party Providers, Merchants and Other Third Parties

"Third Party Provider Wallet Services" are products or services provided by third party providers ("Third Party Providers") that you access through Google Wallet. These Third Party Provider Wallet Services are subject to the Third Party Provider's terms and conditions and privacy policy. This Google Wallet Privacy Policy does not apply to Third Party Provider Wallet Services. Third Party Providers are not affiliated with Google. The Third Party Provider Wallet Services are identified within the Google Wallet as being offered to you by the specified partner.

When you register with a Third Party Provider for a Third Party Provider Wallet Service and subsequently use the Third Party Provider Wallet Service, Google Wallet will disclose certain information to the Third Party Provider. The Third Party Providers receipt of, use of, and disclosure of your personal information from Google Wallet is subject to the Third Party Provider's privacy policy and data security policy.

If you are making a purchase or undertaking a loyalty item or offer redemption at a merchant retail location or on a merchant website using Mobile Wallet, Mobile Wallet may transmit certain information to the merchant, including for example your card number and other personal information needed to complete the transaction (for

example, the fact that you have previously purchased 10 cups of coffee and are redeeming an offer for a free cup of coffee). We are not responsible for which merchants or other third parties you choose to share information with from Mobile Wallet. This Privacy Policy does not apply to your use of Mobile Wallet with third parties and any resulting data uses or disclosures by such third parties.

Information Sharing

We will not sell or rent your personal information to companies or individuals outside of Google. If you are making a purchase through Google Wallet, we may share portions of your credit card number with the retailer to identify the transaction, but we will not share your full credit card number with the retailer without your opt-in consent, except in the limited circumstances described below. In addition, we will only share your personal information with other companies or individuals outside Google as permitted [Google Privacy Policy](#) and in the following circumstances:

- As necessary to process your transaction and maintain your account. As with any credit card payment, if you process a credit card transaction through the Processing Service, we need to share some information (for example, your name and credit card number) with the banks and other entities in the financial system that process credit card transactions. For payment transactions processed through your Carrier Billing Account, we will need to share information with the Carrier holding your Carrier Billing Account in order to charge your Carrier Billing Account and for other purposes related to processing Carrier Billing transactions, such as purchases, reversals, refunds, adjustments, disputes and customer support. Some retailers require that their buyers provide a telephone number in order to process a transaction. In those cases, we will share your telephone number with the merchant and you will be notified before you complete your transaction. At a merchant's request, we may also serve Processing Service transaction data through a web beacon so that the merchant can analyze or audit its web traffic. We will provide you with a notice when a web beacon is served within Google Wallet. For more information on [web beacons](#), [click here](#).
- To a Third Party Provider, to complete your registration for Third Party Provider Wallet Services and to facilitate Third Party Provider Wallet Services you request.
- To detect, prevent or otherwise address fraud, security or technical issues.
- We have your consent. We require opt-in consent for the sharing of any sensitive personal information, except as otherwise described in this section or the Google Privacy Policy.
- We provide such information to our subsidiaries, affiliated companies or other businesses or entities for the purpose of processing personal information on our behalf. We require that these parties agree to process such information based on our instructions and in compliance with this Policy and any other appropriate confidentiality and security measures.
- We have a good faith belief that access, use, preservation or disclosure of such information is reasonably necessary to (a) satisfy any applicable law, regulation, legal process or enforceable governmental request, (b) enforce applicable Terms of Service, including investigation of potential violations thereof, (c) detect, prevent or otherwise address fraud, security or technical issues or (d) protect against imminent harm to the rights, property or safety of Google, its users or the public as required or permitted by law.
- If you are using a credit card issued by the merchant from whom you are making a purchase through the Processing Service (i.e., a 'private

label credit card'), that merchant will receive your entire credit card number in association with your purchase.

- If you make purchases on participating merchant websites from your smartphone using the Mobile Wallet, that merchant will receive your entire card number in association with your purchase.
- We may share aggregated non-personally identifiable information with third parties. For example, we may disclose that overall usage of Google Wallet in a particular geographic area or that a certain percentage of users use a particular type of credit or debit card. However, if we do share this aggregated information, we do not include personally identifiable information without your explicit opt-in consent or in the limited circumstances described above.

When you shop at a seller for the first time and complete an order, you'll be given a choice whether you'd like to receive promotional emails from the seller. If you decide later that you don't want to receive promotional emails from a seller, you will need to contact the seller directly.

If Google or its subsidiaries become involved in a merger, acquisition or any form of sale of some or all of their assets, we will provide notice before personal information is transferred and becomes subject to a different privacy policy.

Information security

We take appropriate security measures to protect against unauthorized access to or unauthorized alteration, disclosure or destruction of data that is stored at Google in connection with Google Wallet. These include internal reviews of our data collection, storage and processing practices and security measures, as well as physical and technical security measures to guard against unauthorized access to systems where we store personal data. For example, your credit card number will always be stored in an encrypted form (except when you provide it to us in a communication outside our web page interface).

The security of your Google Wallet account also depends on keeping your account password confidential, and you should not share your account name or password with anyone. If you do share your account information with a third party, they will have access to your account and your personal information.

The Google Wallet Service information security program does not apply to any information, such as information arising from a Third Party Provider Wallet Service, that is stored on your Google Wallet Application, as that information is outside of the Google-controlled data centers. It is your responsibility to control access to your mobile device and the Google Wallet Application on your device, including keeping your PIN confidential and not sharing it with anyone. It is your responsibility to alert Google or the relevant partner if you believe that the security of the information in the Google Wallet Application has been compromised. For more information about our security practices, please see the main [Google Privacy Policy](#).

Accessing and updating personal information

You can review and update your payment information available through the Processing Service by logging in to your Google Account or the Mobile Wallet Application and going to the 'Purchase History' page, where you can update or remove your address and method of payment. You can also view your previous transaction history on the 'Purchase History' page.

You can disable the Google Wallet Processing Service by [contacting us](#). Mobile Wallet can be disabled through the Mobile Wallet Application. If you do so, your payment information and transaction history will no longer be viewable through Google Wallet. However, in order to meet our reporting and auditing obligations and to detect, deter as well as prevent fraud or other misconduct on our systems, the

information will be retained in our systems for so long as there remains a business necessity. If you disable Google Wallet, your personally identifiable information will not be used by Google or shared with third parties except for these purposes. We may delete these records over time if permitted or required by law.

Disabling Google Wallet does not close or cancel your Google Account. For more information about how to manage your Google Account preferences, please [click here](#). This Privacy Policy continues to apply to the personal information that we maintain after you disable Google Wallet or close or cancel your Google Account.

Sharing Between Affiliates

We operate the Google Wallet Processing Service through wholly owned subsidiaries of Google. For US users, that subsidiary is Google Payment Corporation and for European users that subsidiary is Google Payment Limited (based in the United Kingdom). For countries outside of the United States and Europe, please consult the Terms of Service made available to you within the service to learn more about the corporate entity offering the service. We operate the Mobile Wallet through Google Inc.

The information that we collect, including information obtained from third parties, is shared between Google Inc. and its subsidiaries to operate the service. Neither Google nor its subsidiaries will share your information with others except as described in this Privacy Policy.

We provide you with the right to opt out of certain sharing between Google and its subsidiaries. Specifically, you may choose to opt out of:

- The sharing between Google and its subsidiaries of information that does not pertain to your transactions or experiences with Google Wallet (also called 'non-transactional information', e.g. information we may obtain from third parties to verify your identity) and
- The use by Google of information shared between Google and its subsidiaries to promote Google products and services.

Please remember, regardless of whether you choose to opt out of this sharing or not, we will never sell or rent your personal information, and we will not share your personal information with anyone outside of Google or its subsidiaries except as described in this Privacy Policy.

If you don't want us to share non-transactional data between Google and its subsidiaries, please click [here](#).

If you don't want us to use any information shared between Google and its subsidiaries to promote Google products and services to you, please click [here](#).

Changes to this policy

Please note that this Privacy Policy may change from time to time. We will not reduce your rights under this Policy without your explicit consent. We will post any Privacy Policy changes on this page and, if the changes are significant, we will provide a more prominent notice (including notification in your account interface or email notification). Each version of this Privacy Policy will be identified at the top of the page by its effective date and we will also keep prior versions of this Privacy Policy in an archive for your review.

If you have any questions about this Policy, please feel free to contact us through our website or write to us at Privacy Matters, c/o Google Inc., 1600 Amphitheatre Parkway, Mountain View, California, 94043 USA.

Google and its subsidiaries adhere to the US Safe Harbour privacy principles of Notice, Choice, Onward Transfer, Security, Data Integrity, Access and Enforcement

Privacy Policy

Page 7 of 7

and are registered with the US Department of Commerce's Safe Harbour programme.

©2011 Google - Google Home

EXHIBIT C



Privacy Notice

Google Wallet Privacy Notice

Last modified August 1, 2012

The [Google Privacy Policy](#) describes how we treat personal information when you use Google's products and services. "Google Wallet" is a product offered to Google Account holders. Your use of Google Wallet is therefore subject to the Google Privacy Policy. In addition, the following notice describes our privacy practices that are specific to Google Wallet.

Google Wallet refers to Google payment services that are provided by both Google Inc. and its wholly owned subsidiaries. For US users, that subsidiary is Google Payment Corporation ("GPC"), and for users in the European Economic Area (EEA), it is Google Payment Limited ("GPL") (based in the United Kingdom). For countries outside of the United States and the EEA, please consult the Google Wallet Terms of Service made available to you within the service to learn more about the subsidiary offering the service.

Your use of Google Wallet is governed by the Google Wallet Terms of Service. Please consult the Terms of Service for detailed information about the specific services of Google Wallet. Capitalized terms not defined in this Google Wallet Privacy Notice shall have the meaning ascribed to them in the Terms of Service.

Information we collect

In addition to the information listed in the [Google Privacy Policy](#), we may also collect the following:

- **Registration information** - When you sign up for Google Wallet, you are creating a Wallet account that is associated with your Google Account. Depending on the services of Google Wallet you use, in addition to the information listed in the [Google Privacy Policy](#), you may be asked to provide the following information: Credit or debit card number and card expiration date, bank account number and expiration date, address, date of birth, last four digits of your social security number, and for sellers or businesses specifically, your business category and certain information about your sales or transaction volume. In addition, for services requiring additional customer or seller identification, you may also be asked to provide your full social security or taxpayer identification number (or some other government-issued identification number). In some cases, we may also ask you to send us additional information or to answer additional questions to help verify your information. Finally, if you register a Carrier Billing Account, we will ask you to provide your mobile telephone number and the name and billing address associated with that number.
- **Information obtained from third parties** - We may obtain information about you from third party verification services, information arising from Google Wallet transactions at merchant locations, information regarding your use of payment methods issued by third parties that are linked to the Google Wallet service, information regarding access to balances held in your Google Wallet account, and information from a Carrier in connection with Carrier Billing.

Also, for sellers, we may obtain information about you and your business from a credit bureau or a business information service.

- **Transaction information** - When you use Google Wallet to conduct a transaction, we may collect information about the transaction, including: Date, time and amount of the transaction, a description provided by the seller of the goods or services purchased, any photo you choose to associate with the

transaction, the names and email addresses of the seller and buyer (or sender and recipient), the type of payment method used, your description of the reason for the transaction, and the offer associated with the transaction, if any.

How we use the information we collect

In addition to the uses listed in the [Google Privacy Policy](#), we use the information you provide us, as well as information about you from third parties, in order to provide you with Google Wallet services, and to protect you from fraud, phishing or other misconduct. Such information may also be used to assist third parties in the provision of products or services that you request from them.

Your registration information is stored in association with your Google Account and your registration of a payment method will be stored on Google's servers. In addition, certain data elements may also be stored on your mobile device in encrypted form.

Use of Google Wallet with third parties

We are not responsible for which merchants or other third parties you choose to share information with from Google Wallet. These include third party provider Wallet services that you register for directly and access through Google Wallet. The third party's receipt of, use of, and disclosure of your personal information from Google Wallet is subject to the third party's privacy policy, data security policy and terms and conditions. This Google Wallet Privacy Notice does not apply to your use of Google Wallet with third parties and any resulting data uses or disclosures by such third parties.

Information we share

We will only share your personal information with other companies or individuals outside of Google in the following circumstances:

- As permitted under the [Google Privacy Policy](#).
- As necessary to process your transaction and maintain your account.
- To complete your registration for a service provided by a third party.

Information security

For more information about our security practices, please see the main [Google Privacy Policy](#).

The security of your Google Wallet account depends on you keeping your account password confidential. If you share your account information with a third party, he or she will have access to your account and your personal information.

It is your responsibility to control access to your mobile device and the Google Wallet application on your device, including keeping your PIN confidential and not sharing it with anyone. It is also your responsibility to alert Google or the relevant partner if you believe that the security of the information in the Google Wallet application has been compromised.

Sharing between affiliates

The information that we collect, including information obtained from third parties, is shared between GPC and its affiliates, including Google Inc., to operate the service. Neither GPC nor its affiliates will share your information with others except as described in this Privacy Notice.

We provide you with the right to opt out of certain sharing between GPC and its affiliates. Specifically, you may choose to opt out of:

- The sharing between GPC and its affiliates of personal information about your creditworthiness; and,
- The sharing of information between GPC and its affiliates for those affiliates to market to you.

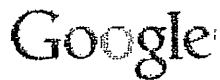
We will not share your personal information with anyone outside of GPC or its affiliates except as described in this Privacy Notice. As explained above, Google Wallet is a product offered to Google Account holders. Data you provide to Google Inc. for the purpose of signing up for a Google Account is not affected by the opt-out provisions in this notice.

If you don't want us to share personal information about your creditworthiness between GPC and its affiliates, please click [here](#).

If you don't want us to use any information shared between GPC and its affiliates for those affiliates to market to you, please click [here](#).

©2011 Google - [Google Home](#) [Google Terms of Service](#) [Previous Privacy Notices](#)

EXHIBIT D



Policies & Principles

Privacy Policy

This is an archived version of our Privacy Policy. View the [current version](#) or [all past versions](#).

Last modified: March 1, 2012

There are many different ways you can use our services – to search for and share information, to communicate with other people or to create new content. When you share information with us, for example by creating a [Google Account](#), we can make those services even better – to show you more relevant search results and ads, to help you connect with people or to make sharing with others quicker and easier. As you use our services, we want you to be clear how we're using information and the ways in which you can protect your privacy.

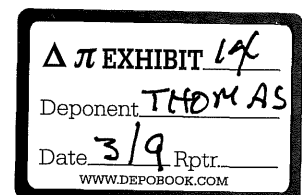
Our Privacy Policy explains:

- What information we collect and why we collect it.
- How we use that information.
- The choices we offer, including how to access and update information.

We've tried to keep it as simple as possible, but if you're not familiar with terms like cookies, IP addresses, pixel tags and browsers, then read about these [key terms](#) first. Your privacy matters to Google so whether you are new to Google or a long-time user, please do take the time to get to know our practices – and if you have any questions [contact us](#).

Information we collect

We collect information to provide better services to all of our users – from figuring out basic stuff like which language you speak, to more complex things like which ads you'll find most useful or the people who matter most to you online.



We collect information in two ways:

- **Information you give us.** For example, many of our services require you to sign up for a Google Account. When you do, we'll ask for personal information, like your name, email address, telephone number or credit card. If you want to take full advantage of the sharing features we offer, we might also ask you to create a publicly visible Google Profile, which may include your name and photo.
- **Information we get from your use of our services.** We may collect information about the services that you use and how you use them, like when you visit a website that uses our advertising services or you view and interact with our ads and content. This information includes:

- **Device information**

We may collect device-specific information (such as your hardware model, operating system version, unique device identifiers, and mobile network information including phone number). Google may associate your device identifiers or phone number with your Google Account.

- **Log information**

When you use our services or view content provided by Google, we may automatically collect and store certain information in server logs. This may include:

- details of how you used our service, such as your search queries.
- telephony log information like your phone number, calling-party number, forwarding numbers, time and date of calls, duration of calls, SMS routing information and types of calls.
- Internet protocol address.
- device event information such as crashes, system activity, hardware settings, browser type, browser language, the date and time of your request and referral URL.
- cookies that may uniquely identify your browser or your Google Account.

- **Location information**

When you use a location-enabled Google service, we may collect and process information about your actual location, like GPS signals sent by a mobile device. We may also use various technologies to determine location, such as sensor data from your device that may, for example, provide information on nearby Wi-Fi access points and cell towers.

- **Unique application numbers**

Certain services include a unique application number. This number and information about your installation (for example, the operating system type and application version number) may be sent to Google when you install or uninstall that service or when that service periodically contacts our servers, such as for automatic updates.

- **Local storage**

We may collect and store information (including personal information) locally on your device using mechanisms such as browser web storage (including HTML 5) and application data caches.

- **Cookies and anonymous identifiers**

We use various technologies to collect and store information when you visit a Google service, and this may include sending one or more cookies or anonymous identifiers to your device. We also use cookies and anonymous identifiers when you interact with services we offer to our partners, such as advertising services or Google features that may appear on other sites.

How we use information we collect

We use the information we collect from all of our services to provide, maintain, protect and improve them, to develop new ones, and to protect Google and our users. We also use this information to offer you tailored content – like giving you more relevant search results and ads.

We may use the name you provide for your Google Profile across all of the services we offer that require a Google Account. In addition, we may replace past names associated with your Google Account so that you are represented consistently across all our services. If other

users already have your email, or other information that identifies you, we may show them your publicly visible Google Profile information, such as your name and photo.

When you contact Google, we may keep a record of your communication to help solve any issues you might be facing. We may use your email address to inform you about our services, such as letting you know about upcoming changes or improvements.

We use information collected from cookies and other technologies, like pixel tags, to improve your user experience and the overall quality of our services. For example, by saving your language preferences, we'll be able to have our services appear in the language you prefer. When showing you tailored ads, we will not associate a cookie or anonymous identifier with sensitive categories, such as those based on race, religion, sexual orientation or health.

We may combine personal information from one service with information, including personal information, from other Google services – for example to make it easier to share things with people you know. We will not combine DoubleClick cookie information with personally identifiable information unless we have your opt-in consent.

We will ask for your consent before using information for a purpose other than those that are set out in this Privacy Policy.

Google processes personal information on our servers in many countries around the world. We may process your personal information on a server located outside the country where you live.

Transparency and choice

People have different privacy concerns. Our goal is to be clear about what information we collect, so that you can make meaningful choices about how it is used. For example, you can:

- Review and control certain types of information tied to your Google Account by using Google Dashboard.
- View and edit your ads preferences, such as which categories might interest you, using the Ads Preferences Manager. You can also opt out of certain Google advertising services here.
- Use our editor to see and adjust how your Google Profile appears to particular individuals.
- Control who you share information with.

- Take information out of many of our services.

You may also set your browser to block all cookies, including cookies associated with our services, or to indicate when a cookie is being set by us. However, it's important to remember that many of our services may not function properly if your cookies are disabled. For example, we may not remember your language preferences.

Information you share

Many of our services let you share information with others. Remember that when you share information publicly, it may be indexable by search engines, including Google. Our services provide you with different options on sharing and removing your content.

Accessing and updating your personal information

Whenever you use our services, we aim to provide you with access to your personal information. If that information is wrong, we strive to give you ways to update it quickly or to delete it – unless we have to keep that information for legitimate business or legal purposes. When updating your personal information, we may ask you to verify your identity before we can act on your request.

We may reject requests that are unreasonably repetitive, require disproportionate technical effort (for example, developing a new system or fundamentally changing an existing practice), risk the privacy of others, or would be extremely impractical (for instance, requests concerning information residing on backup tapes).

Where we can provide information access and correction, we will do so for free, except where it would require a disproportionate effort. We aim to maintain our services in a manner that protects information from accidental or malicious destruction. Because of this, after you delete information from our services, we may not immediately delete residual copies from our active servers and may not remove information from our backup systems.

Information we share

We do not share personal information with companies, organizations and individuals outside of Google unless one of the following circumstances apply:

- **With your consent**

We will share personal information with companies, organizations or individuals outside of Google when we have your consent to do so. We require opt-in consent for the sharing of any sensitive personal information.

- **With domain administrators**

If your Google Account is managed for you by a domain administrator (for example, for Google Apps users) then your domain administrator and resellers who provide user support to your organization will have access to your Google Account information (including your email and other data). Your domain administrator may be able to:

- view statistics regarding your account, like statistics regarding applications you install.
- change your account password.
- suspend or terminate your account access.
- access or retain information stored as part of your account.
- receive your account information in order to satisfy applicable law, regulation, legal process or enforceable governmental request.
- restrict your ability to delete or edit information or privacy settings.

Please refer to your domain administrator's privacy policy for more information.

- **For external processing**

We provide personal information to our affiliates or other trusted businesses or persons to process it for us, based on our instructions and in compliance with our Privacy Policy and any other appropriate confidentiality and security measures.

- **For legal reasons**

We will share personal information with companies, organizations or individuals outside of Google if we have a good-faith belief that access, use, preservation or disclosure of the information is reasonably necessary to:

- meet any applicable law, regulation, legal process or enforceable governmental request.
- enforce applicable Terms of Service, including investigation of potential violations.
- detect, prevent, or otherwise address fraud, security or technical issues.

- protect against harm to the rights, property or safety of Google, our users or the public as required or permitted by law.

We may share aggregated, non-personally identifiable information publicly and with our partners – like publishers, advertisers or connected sites. For example, we may share information publicly to show trends about the general use of our services.

If Google is involved in a merger, acquisition or asset sale, we will continue to ensure the confidentiality of any personal information and give affected users notice before personal information is transferred or becomes subject to a different privacy policy.

Information security

We work hard to protect Google and our users from unauthorized access to or unauthorized alteration, disclosure or destruction of information we hold. In particular:

- We encrypt many of our services using SSL.
- We offer you two step verification when you access your Google Account, and a Safe Browsing feature in Google Chrome.
- We review our information collection, storage and processing practices, including physical security measures, to guard against unauthorized access to systems.
- We restrict access to personal information to Google employees, contractors and agents who need to know that information in order to process it for us, and who are subject to strict contractual confidentiality obligations and may be disciplined or terminated if they fail to meet these obligations.

Application

Our Privacy Policy applies to all of the services offered by Google Inc. and its affiliates, including services offered on other sites (such as our advertising services), but excludes services that have separate privacy policies that do not incorporate this Privacy Policy.

Our Privacy Policy does not apply to services offered by other companies or individuals, including products or sites that may be displayed to you in search results, sites that may include Google services, or other sites linked from our services. Our Privacy Policy does not cover the information practices of other companies and organizations who advertise our services, and who may use cookies, pixel tags and other technologies to serve and offer relevant ads.

Enforcement

We regularly review our compliance with our Privacy Policy. We also adhere to several self regulatory frameworks. When we receive formal written complaints, we will contact the person who made the complaint to follow up. We work with the appropriate regulatory authorities, including local data protection authorities, to resolve any complaints regarding the transfer of personal data that we cannot resolve with our users directly.

Changes

Our Privacy Policy may change from time to time. We will not reduce your rights under this Privacy Policy without your explicit consent. We will post any privacy policy changes on this page and, if the changes are significant, we will provide a more prominent notice (including, for certain services, email notification of privacy policy changes). We will also keep prior versions of this Privacy Policy in an archive for your review.

Specific product practices

The following notices explain specific privacy practices with respect to certain Google products and services that you may use:

- Chrome and Chrome OS
- Books
- Wallet

DOCUMENT SOUGHT TO BE SEALED

**EXHIBIT E
REDACTED
IN FULL**

DOCUMENT SOUGHT TO BE SEALED

**EXHIBIT F
REDACTED
IN FULL**

DOCUMENT SOUGHT TO BE SEALED

**EXHIBIT G
REDACTED
IN FULL**

EXHIBIT H

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 1

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

IN RE GOOGLE, INC.

Case No.

PRIVACY POLICY LITIGATION

5:12-cv-01382-PSG

DEPOSITION OF FICUS KIRKPATRICK

San Francisco, California

Wednesday, January 21, 2015

** CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY **

Reported By:

TAVIA A. MANNING

CSR No. 13294, RPR, CLR, CCRR

PAGES 1 - 217

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 44

1 Q. "You" being the user.

2 A. Yes. The user needs to pay in advance of
3 downloading.

4 Q. Correct.

5 And free applications come at no cost to the
6 user, at least in the first instance; fair enough?

7 A. You don't have to pay to download. You may pay
8 for something later, but not the download.

9 Q. And you would be referring then to "freemium"
10 applications; is that a term that you're familiar with?

11 A. I think that means something a little broader.
12 You wouldn't -- I don't think you would call, like, the
13 Amazon app a "freemium" application. But you can spend
14 a lot of money in it if you wanted to.

15 Q. We can circle back to that.

16 But the applications that are sold in the Play
17 Store aren't all made by Google; is that correct?

18 A. That is correct.

19 Q. Would you say -- is it fair to say that most of
20 the applications sold in the Play Store are not made by
21 Google?

22 A. Yes. The vast majority of applications on the
23 Play Store are made by people other than Google.

24 Q. Do you have any idea of the proportion or the
25 percentage of the applications that are made by someone

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 45

1 other than Google?

2 MR. PAGE: I'll object as beyond the scope.

3 THE WITNESS: I guess not any more specifically
4 other than the vast majority are not made by Google.

5 BY MR. MCGEE:

6 Q. Vast majority, 75 percent?

7 A. No. 99 percent or more.

8 Q. 99 or more, okay.

9 Google allows the people who develop these
10 other applications to sell them in the Play Store; is
11 that correct?

12 A. Yes. The Play Store, we offer a mechanism for
13 people to put their applications on the market by our
14 product.

15 Q. And Google charges a fee for that permission;
16 is that correct?

17 A. We do take a cut of the sales price. You don't
18 have to pay to upload an application, for instance.

19 Q. Is there a registration fee to -- you know, as
20 a condition to uploading apps for sale in the Play
21 Store?

22 A. There is a registration fee to sign up as a
23 developer on the Play Store, but not -- once you have a
24 developer account, there's no fee for uploading an app.

25 Q. So, in other words, someone could pay the

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 53

1 MR. PAGE: Objection; vague and ambiguous.

2 BY MR. MCGEE:

3 Q. Any kind of Google account.

4 A. You do not have to have a Google account to use
5 an Android device.

6 Q. What could you do with an Android device if you
7 have no Google account?

8 MR. PAGE: Objection; beyond the scope, calls
9 for speculation.

10 THE WITNESS: I mean, it's a computer, so kind
11 of the magic of computers is that you can do anything
12 with them, really. So I am not sure if I understand the
13 question exactly.

14 BY MR. MCGEE:

15 Q. Okay. Can you access the Play Store or
16 download an app if you don't have any Google accounts
17 whatsoever?

18 MR. PAGE: Objection; compound.

19 THE WITNESS: You can download an app without a
20 Google account.

21 BY MR. MCGEE:

22 Q. Okay. How would you do that?

23 A. There are alternative competitor app stores to
24 the Play Store. So that would be one way.

25 Q. So my question was: Can you get onto the Play

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 54

1 Store and download an app without a Google account?

2 MR. PAGE: Objection.

3 THE WITNESS: Sorry.

4 MR. PAGE: It wasn't your question, but if you
5 want to ask it, go ahead.

6 BY MR. McGEE:

7 Q. That's my question now.

8 A. Sorry. You asked can you get on the Play Store
9 or download an app. So using the Play Store requires a
10 Google account.

11 Q. Okay. What kinds of Google accounts are
12 Android users capable of creating generally?

13 MR. PAGE: Objection; vague and ambiguous, and
14 beyond the scope.

15 THE WITNESS: Sorry, what kinds of Google
16 account?

17 BY MR. McGEE:

18 Q. So Google offers many services; correct?

19 A. Yes.

20 Q. And most of them require some sort of account
21 in order to use them?

22 MR. PAGE: Objection; assumes facts.

23 THE WITNESS: Where Google services require an
24 account, they require a Google account.

25 //

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 55

1 BY MR. McGEE:

2 Q. So you have to have an underlying account, and
3 then you can create a sort of product-specific account;
4 is that what you're saying?

5 MR. PAGE: Objection; misstates his prior
6 testimony.

7 THE WITNESS: Yeah, there's kind of a base
8 level of Google account. And then there are some
9 services where you need to do some additional work to
10 enable that service on your account.

11 BY MR. McGEE:

12 Q. Okay. Are there any Android-specific accounts
13 that users can create?

14 MR. PAGE: Objection; vague and ambiguous.

15 THE WITNESS: I don't think in any way that
16 would be perceived by the user as Android specific. We
17 may -- we may do some recordkeeping to know that the
18 account was made on an Android device. But to the user
19 I think it's no different than something they make,
20 like, when they sign up for GMail.

21 BY MR. McGEE:

22 Q. So a Google account can become associated with
23 an Android-powered device; correct?

24 A. You can add a Google account to an Android
25 device. Some Android devices support Google accounts.

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 56

1 Not all Android devices support Google accounts. But
2 you can add a Google account to some Android devices.

3 Q. So will it be possible for an application
4 that's running on an Android-powered device to identify
5 the Google account that's associated with that device?

6 MR. PAGE: Objection; compound and beyond the
7 scope.

8 THE WITNESS: I should clarify that you can
9 have more than one Google account on a device. So
10 there's not necessarily a way to identify the Google
11 account. And it would depend on that application's
12 level of privilege.

13 BY MR. McGEE:

14 Q. Okay. Who has to -- who is capable of
15 determining the level of privilege?

16 MR. PAGE: Objection; vague and ambiguous and
17 beyond the scope.

18 THE WITNESS: The user determines the
19 privileges that an application would get.

20 BY MR. McGEE:

21 Q. Okay. To purchase a paid application through
22 the Google Play Store, a user has to have a Google
23 Wallet account; correct?

24 A. That's right.

25 Q. In order to create a Google Wallet account,

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 57

1 what kinds of information must the user provide?

2 MR. PAGE: Objection; vague and ambiguous.

3 THE WITNESS: It depends on how the user
4 chooses to pay. But, typically, it's some form of
5 payment information, like a credit card number and a
6 billing address.

7 BY MR. McGEE:

8 Q. What about a name?

9 A. Yeah, I believe that's required in the case of
10 a credit card.

11 Q. What about an e-mail address?

12 A. All Google accounts implicitly have an e-mail
13 address associated with them. So you do not have to
14 provide an e-mail address.

15 Q. Any other information?

16 MR. PAGE: Objection; vague and ambiguous.

17 THE WITNESS: It depends on how the user would
18 pay, so...

19 BY MR. McGEE:

20 Q. Okay. Can a Google Wallet account become
21 associated with a particular Android-powered device?

22 MR. PAGE: Objection; vague and ambiguous.

23 THE WITNESS: I wouldn't describe it that way.
24 The Google Wallet account is the Google account. It's
25 more like a feature that is enabled on the Google

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 81

1 A. I think it's actually -- just trying to be
2 precise. I think it's not certain fields have to be
3 removed. I think it's more of a white list model where
4 we say take exactly these records so that if a new one
5 comes, it doesn't accidentally get out to the developer.

6 MR. PAGE: Let us know when it's a good time
7 for a break. We've been going for a while.

8 MR. MCGEE: Whenever you guys want.

9 MR. PAGE: Let's take a break.

10 (Recess taken.)

11 MR. PAGE: Before we go on, he has one
12 correction to some earlier testimony on a date.

13 THE WITNESS: Yeah, when we were talking about,
14 when we stopped, including name and e-mail address, that
15 was last year, not the year before. My mistake. I
16 think May last year.

17 BY MR. MCGEE:

18 Q. May 2014?

19 A. Yeah.

20 Q. And did you look at a document to come to that
21 recollection?

22 MR. PAGE: Objection; calls for attorney-client
23 communication.

24 THE WITNESS: No. No.

25 //

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 85

1 A. Yeah, I think that's a good way to describe it.

2 Q. Okay. Do you know, is there some sort of time
3 lapse between the purchase of a paid application and the
4 inclusion of that user's information in the Play records
5 which are accessible to the developer?

6 MR. PAGE: Objection; vague and ambiguous.

7 BY MR. MCGEE:

8 Q. Is it immediate or is there a time lapse?

9 A. So there's always going to be some time elapsed
10 for processing the records, such that they're available
11 for reading, but there isn't, like, an intentional
12 delay. You know, we don't, like, put it in purgatory or
13 anything.

14 Q. Just to give you a hypothetical, if I am an
15 Android user, and I purchase a paid application that's
16 sold by a major third-party developer, like Rovio,
17 through the Play Store. So assume that. And Rovio
18 later logs into its Developer Console today, the same
19 day I made my purchase, and queries order histories. It
20 will see that I purchased its application today; meaning
21 that the information associated with my order is going
22 to be included in the order history the same day?

23 Correct?

24 A. Just in the interest of clarity, I will say,
25 like, some moment in, you know, like one-millionth of a

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 86

1 second later is the same day. So, you know, like, if
2 you came that morning, it's possible that if the user
3 made that purchase that morning and you look at it that
4 evening, it's very, very likely that the information is
5 available.

6 Do you see what I am getting at?

7 Like, there's some natural delay in processing
8 this stuff, such that if these things happen on the same
9 day, you know, that can be a second apart, that can be
10 23 hours apart; right?

11 Q. Understood.

12 A. So, yeah, it's made, I think, available as soon
13 as possible is maybe the best way to describe it.

14 Q. Okay. And so I am clear, I think you may have
15 testified about this already, but how in my hypothetical
16 would Rovio's console get updated?

17 Is there some sort of process that sort of
18 automatically adds new user information, new order
19 information to the order histories and, if so, what is
20 that called?

21 MR. PAGE: Objection; assumes facts.

22 THE WITNESS: So when the user makes an order
23 or makes a purchase, you know, as part of the process of
24 making that purchase, we create a record of that
25 purchase. So an order or an item in the purchase

CONFIDENTIAL - OUTSIDE COUNSELS' EYES ONLY

Page 87

1 history, that data is available for the Developer
2 Console to read.

3 BY MR. McGEE:

4 Q. Is there a specific name for the records that
5 you would create for each purchase?

6 A. We'll typically just call it a "purchase."

7 Q. Purchase record or just a purchase?

8 A. We just call it a "purchase."

9 Q. Okay. If a user purchased a paid application
10 through the Play Store sometime ago, three months ago,
11 six months ago, and installed the application on his or
12 her device at that time, but later gets a new device,
13 new Android device, the user would have to redownload
14 that application, correct, because it won't be on the
15 new device?

16 A. If they want that application on their device,
17 yeah. They don't have to download it, but they can.

18 Q. If they do?

19 A. If it's compatible with their new device.

20 Q. If they do, they won't have to pay for it
21 again; correct?

22 A. No. They will not have to pay again.

23 Q. And that's because they've paid the fee once.
24 They're entitled to download onto a different device if
25 that's what they want to do?

EXHIBIT I

CONFIDENTIAL - ATTORNEYS EYES ONLY

ATTORNEYS' EYES ONLY

Page 1

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

IN RE GOOGLE, INC. PRIVACY No. 12-CV-01382 PSG
POLICY LITIGATION,

CONFIDENTIAL

CONFIDENTIAL -- ATTORNEYS' EYES ONLY

DEPOSITION of MARK THOMAS

LOS ANGELES, CALIFORNIA

MONDAY, MARCH 9, 2015

VOLUME 1

Reported by

Daryl Baucum, RPR, CRR, RMR, CSR No. 10356

Job No. 2029256, PAGES 1 - 201

CONFIDENTIAL - ATTORNEYS EYES ONLY

Page 82

1 Are you talking about a Google account or
2 an account with the app developer?

3 MR. MC GEE: It could be either.

4 THE WITNESS: Well --

5 MR. PAGE: Same objection; compound.

6 THE WITNESS: Every time -- so let's
7 say -- I mean for a Wallet account, the first time
8 you buy something -- most often, the most common
9 case, the first time I buy something at a Playstore,
10 I will set up a Wallet account.

11 I have already set up my Google account
12 because I have got my Android phone and I have
13 installed and first set up a Wallet account.

14 Let's say it's my first purchase. And
15 every purchase after that, we would just reuse that
16 same Wallet account.

17 And if I am installing a game, I might be
18 asked to set up a new account with each app that
19 I -- yeah, within each game that I install.

20 So there is many accounts in a given
21 transaction, but the Wallet account in many cases
22 can be persistent across purchases.

23 BY MR. MC GEE:

24 Q Understood.

25 So is it your understanding that app

CONFIDENTIAL - ATTORNEYS EYES ONLY

Page 113

1 hinder Google's ability to process individual
2 transactions if it decides to disclose maybe just a
3 name, maybe just an E-mail address?

4 Why does it have to be both name and
5 E-mail address?

6 A I see.

7 Q Why can't it be just a count of the apps
8 sold?

9 MR. PAGE: Objection; calls for
10 speculation, but if you understand.

11 BY MR. MC GEE:

12 Q If you understand.

13 A I think I get it. Is it necessary to
14 process those transactions -- is the sharing of
15 E-mail and name necessary to process those
16 transactions. No, there is probably other ways of
17 doing it.

18 Again, some of the use cases like the
19 support use case and things that merchants had
20 reinforced to us that were very important, those use
21 cases would be perhaps best served if we did share
22 that information with them so they could actually do
23 that searching for orders and responding to, you
24 know, service requests and things like that.

25 Q But it's not necessary to process it.

CONFIDENTIAL - ATTORNEYS EYES ONLY

Page 114

1 A No, there is other ways of doing it.

2 Q So I want to jump to the topic that you
3 just mentioned, which is searching for order
4 details.

5 Is it the case even with the new merchant
6 center that merchants, including app developers, can
7 search their order history by E-mail address?

8 A When I was still the product manager for
9 the product, that was the case. I don't know if
10 that has changed since then.

11 Q And we're talking about the new merchant
12 center which unrolled in 2013 -- maybe February or
13 March of 2013, right?

14 A That's correct.

15 Q So what about with respect to the names of
16 the people who bought apps sold by the app
17 developer?

18 A I don't remember if names was searchable.
19 E-mails certainly was. I don't remember if name was
20 searchable.

21 Q To be clear, when we say "searchable," we
22 mean that the merchant would have to type in the
23 exact E-mail address of the person who purchased the
24 app in order to get the information about that
25 order, right?

EXHIBIT J



Interhack
5 E Long St 9th Fl
Columbus, OH 43215

VOX +1 614 545 HACK
FAX +1 614 545 0076
WEB <http://web.interhack.com/>

Computer Expert Report

C. Matthew Curtin, CISSP

Date: 2015/03/13 21:10:55

I AM THE FOUNDER of Interhack Corporation ("Interhack"). Interhack is a privately-held expert firm with practices covering cybersecurity and forensic computer analysis. A true and accurate representation of my testimony history, academic appointments, publications, and other relevant background are available in my curriculum vitae, attached as Appendix A. I am supported by Interhack staff working at my direction and under my supervision.

The law firms of Grant & Eisenhofer P.A., Gardy & Notis LLP, and Bursor & Fisher P.A. engaged Interhack to perform a forensic analysis of data, software specifications, and other documentation related to *In re Google Privacy Policy Litigation*. I reserve the right to make additional declarations in this matter as more data become available.

The fees for this engagement are charged hourly in accordance with a signed engagement letter. My fee for analysis is \$425 per hour, and for testimony delivered live is \$605 per hour. Other Interhack staff supporting me bill at lower rates. Payment for work performed in this engagement is not contingent on the outcome of the matter.

This analysis is based upon sources available to me, including those designated CONFIDENTIAL or CONFIDENTIAL OUTSIDE COUNSEL ONLY under the Protective Order, identified here as [COCO], namely:

1. *Android Market: Now available for users* (GOOG-00000001-02);
2. *Package: android.drm* (GOOG-00000003-07);
3. *App Purchase Flows* (GOOG-00000008-21) [COCO];
4. *public class DownloadManager* (GOOG-00000022-32);
5. *Finsky—Free Application Install Flow* (GOOG-00000033-37) [COCO];
6. Flow diagram of first and further installations of free and paid apps (GOOG-00000038) [COCO];

7. *Finsky Universal Store* (GOOG-00000039-42) [COCO];
8. *Finsky/Checkout Integration* (GOOG-00000043-68) [COCO];
9. *Form of Payment* (GOOG-00000069-85) [COCO];
10. *Introducing Google Play: All your entertainment, anywhere you go* (GOOG-00000086-94);
11. *Google Play Purchases* (GOOG-00000095-125) [COCO];
12. *KYC Explained* (GOOG-00000126-129) [COCO];
13. *Reliable Notifications for the Finsky Client* (GOOG-00000130-132) [COCO];
14. *Life of a Google Play purchase* (GOOG-00000133-193) [COCO];
15. *Unified Play Store User Library* (GOOG-00000194-212) [COCO];
16. *Whisky Deployment and GAIA Service* (GOOG-00000213-225) [COCO];
17. *Customer Marketing 2014 Owning the Android User* (GOOG-00000226-267) [COCO];
18. *Purchase Flow for Finsky Tablet Client App* (GOOG-00000268-292) [COCO];
19. "Buyflow" documentation (GOOG-00000293-306) [COCO];
20. "Buyflow" documentation (GOOG-00000307-326) [COCO];
21. "Buyflow" documentation (GOOG-00000327-355) [COCO];
22. "Buyflow" documentation (GOOG-00000356-394) [COCO];
23. "Buyflow" documentation (GOOG-00000395-433) [COCO];
24. "Buyflow" documentation (GOOG-00000434-459) [COCO];
25. "Buyflow" documentation (GOOG-00000460-489) [COCO];
26. Deposition of Ficus Kirkpatrick, 21 Jan 2015 [COCO];
27. Notice of Deposition of Defendant Google, Inc. Pursuant to Fed. R. Civ. P. 30(b)(6);
28. Plaintiffs' Second Set of Requests for Production to Defendant Google, Inc.;
29. Defendant Google Inc.'s Responses and Objections to Plaintiffs' Fourth Set of Interrogatories; and

30. Letter from Michael H. Page to Kyle J. McGee dated March 12, 2015 regarding API changes (with attachment [COCO]).

I offer expert opinions in this matter after analysis of the data.

1. Between February 2009 and May 2014, Google published to third parties the names, email addresses, and locations of users that purchased content such as Android applications in the *Google Play*¹ store.
2. The disclosure to developers of the names, email addresses, and locations of users that made a purchase in the *Google Play* store is not a technical requirement to completing a purchase transaction nor for the delivery of content to the user.
3. The purchase process includes publication of buyers' information to developers. The business logic implemented by user interfaces such as *Google Play Developer Console* and *Google Checkout Merchant Center* causes a user's name, email address, and location to be published once a purchase is made by the user in *Google Play*.
4. The process of completing a purchase in the store now branded as *Google Play* consumes limited resources local to or used by the purchaser's device.

¹ *Google Play* is used to mean the Google service by this name as well as prior brand names for the same service such as the *Android Market*.

Introduction

In support of its Android operating system platform, Google maintains a marketplace allowing users to easily purchase applications and other electronic content for use on the Android platform. This marketplace was initially created in late 2008 under the name *Android Market* and subsequently renamed *Google Play*.² *Android Market* and *Google Play* are "principally the same product with a new name."³

The *Google Play* marketplace allows third-party application developers and other content publishers to make items available for sale.⁴ Google provides these third-parties with two front-end interfaces, *Google Play Developer Console* and *Google Checkout Merchant Center*, with which they can publish content, see purchase history, and download purchase detail.⁵

The *Google Play* architecture uses other components set up by Google to support other service offerings. For example, a user wishing to make purchases from *Google Play* must have a *Google* account. This account is not specific to the *Google Play* marketplace

² GOOG-000000001-02

³ Deposition of Ficus Kirkpatrick, 21 Jan 2015 pp. 41-42

⁴ GOOG-000000001-02

⁵ Deposition of Ficus Kirkpatrick, 21 Jan 2015 p. 77 and pp. 79-81

but is a common profile used for other services such as *Google Drive* and *GMail*.⁶ The common user profile maintained by Google may contain data fields to include a user's name, email address, and location.⁷

An Android user interacts with the *Google Play* marketplace using either a web browser or a dedicated *Google Play* application.⁸ As a prerequisite to making a purchase, the user must have authenticated to Google using their Google account.⁹ When a purchase is made, databases are updated at Google and on the user's Android device in order to reflect the purchase transaction and that the user, as identified by their Google account, has the right to download the purchased content.¹⁰

None of the databases storing data values associated with the purchase of content from *Google Play* are directly accessible by Google users.¹¹ Google provides specific users permission to view limited data values stored in these databases through interfaces such as the *Google Play Developer Console* and the *Google Checkout Merchant Center*. The specific values that are permitted to be viewed by users of these interfaces are defined by business logic defined by Google and embodied by code implemented by its engineers. All access to data stored in Google's databases are mediated by code meant to enforce business logic defined by Google.¹²

Google Publishes Buyers' Information to Developers

Between February 2009 and May 2014, a developer using the *Google Play Developer Console* or *Google Checkout Merchant Center* would have been able to view the names, email addresses, and locations of those users that purchased content published by the developer.¹³

Those users that purchased applications through *Google Play* were not provided a mechanism by which to opt-out or otherwise prevent their information from being made available through the *Google Play Developer Console*.¹⁴

Providing content to the Web has long been recognized as publishing. Using security controls to protect data published in this manner has likewise been recognized from the earliest days of the medium.¹⁵ Specifically, publication in this matter occurred when Google made buyer names, email addresses, and location available to developers.

Mr. Kirkpatrick testified that he was involved in a decision to stop including names and email addresses in the developer console.¹⁶

⁶ Deposition of Ficus Kirkpatrick, 21 Jan 2015 pp. 54-55

⁷ Deposition of Ficus Kirkpatrick, 21 Jan 2015 pp. 56-57

⁸ Deposition of Ficus Kirkpatrick, 21 Jan 2015 p. 141 and pp. 152-154

⁹ Deposition of Ficus Kirkpatrick, 21 Jan 2015 p. 54

¹⁰ Deposition of Ficus Kirkpatrick, 21 Jan 2015 87-90

¹¹ Deposition of Ficus Kirkpatrick, 21 Jan 2015 pp. 64-65

¹² *Ibid.*

¹³ Deposition of Ficus Kirkpatrick, 21 Jan 2015 pp. 72-73, 81, 182-183

¹⁴ Deposition of Ficus Kirkpatrick, 21 Jan 2015 p. 214

¹⁵ W3C. Putting information onto the web, April 1995. URL <http://www.w3.org/Provider/>. Accessed July 13, 2012; and

¹⁶ Deposition of Ficus Kirkpatrick, 21 Jan 2015 p. 73

Modifications to prevent the disclosure of buyer names and email addresses were made to the code supporting the *Google Play Developer Console* in May 2014.¹⁷

Google Play continued to make content available for sale and process transactions even after changes were made to prevent disclosure of the names and email addresses of those purchasing content.¹⁸

¹⁷ Deposition of Ficus Kirkpatrick, 21 Jan 2015 pp. 73 and 81

¹⁸ Deposition of Ficus Kirkpatrick, 21 Jan 2015 p. 73

Publishing Buyers' Information Unnecessary for Purchase

Relying upon my experience developing software and in the field of computer security, I conclude that there is no technical reason or requirement that would have necessitated the disclosure of buyer name, email addresses, or location to developers.

Purchase Process Includes Publication

A user that creates a Google account implicitly receives an email address.¹⁹

When a user or their device performs certain interactions with Google's servers, they will not be required explicitly to transmit or to provide a name, email address, or location to Google's server because a mapping between these data and Google account identifiers is maintained in Google databases.²⁰

¹⁹ Deposition of Ficus Kirkpatrick, 21 Jan 2015 p. 57

The name, email address, and location stored by Google and associated with a user's Google account was made available to a developer account only after a user made a purchase of content published by the developer in the *Google Play* store. This practice continued between February 2009 and May 2014.²¹

²⁰ Deposition of Ficus Kirkpatrick, 21 Jan 2015 pp. 56-57

Mr. Kirkpatrick testified, "so when the user makes an order or makes a purchase, you know, as part of the process of making that purchase, we create a record of that purchase. So an order or an item in the purchase history, that data is available for the Developer Console to read."²²

²¹ Deposition of Ficus Kirkpatrick, 21 Jan 2015 pp. 71-73 and 74-75

Purchasing content from *Google Play* is an integrated operation with multiple components that work together to form an cohesive, tightly-coupled process.

²² Deposition of Ficus Kirkpatrick, 21 Jan 2015 pp. 86-87

Purchase Process Consumes Android Device Resources

Devices such as mobile phones, tablets, laptops, workstations, and other computing devices use measured or limited resources when communicating with *Google Play* servers over the Internet in the course of making a purchase. Resources used during this interaction include:


1. Electric power;
2. CPU cycles;
3. Main memory; and
4. Network capacity.

Indeed, Mr. Kirkpatrick testified that while making a purchase through *Google Play*, code running on the a user's device will use resources such as:

1. "electricity";
2. "battery";
3. "CPU";
4. "RAM"; and
5. "network."²³

²³ Deposition of Ficus Kirkpatrick, 21 Jan 2015
pp. 156-157

I DECLARE THAT THE FOREGOING is correct. Signed this thirteenth day of March, 2015.



C. Matthew Curtin

Bibliography

HTTP Working Group. Hypertext transfer protocol – http/1.0, 1996. URL <http://www.w3.org/Protocols/HTTP/1.0/spec.html>.

W3C. Putting information onto the web, April 1995. URL <http://www.w3.org/Provider/>. Accessed July 13, 2012.



Interhack
5 E Long St 9th Fl
Columbus, OH 43215

VOX +1 614 545 HACK
FAX +1 614 545 0076
WEB <http://web.interhack.com/>

C. Matthew Curtin

Summary of Expertise

Computer Science in Adjudication

Active as a forensic computer scientist since early 2000. Experience includes routine electronic discovery, litigation consulting, and work as an expert witness in civil, criminal, and administrative actions. Frequently deliver CLE and CJE credit seminars to attorneys and judges on the use of electronic information in adjudication.

Cybersecurity

Consultant to complex information security projects involving incident response, regulatory compliance, and analysis of security program and control effectiveness. Responsible for design and implementation of early Internet and Web security systems.

Operating Systems

Extensive experience in systems implementation, drawing upon theory and practice of operating systems. Applications include customization to optimize function, user experience, security, and performance. Experience teaching operating systems implementation at the university level.

Programming Languages

Broad experience in many languages including Lisp, Perl, Java, C, various languages for UNIX systems, data processing, text markup, and more. Fifteen years' experience teaching use of programming languages at university level.

Protocols

Expert in many widely-used Internet protocols, including development of systems using a variety of networking protocols, and participation in standards-setting workgroups.

Experience

Interhack Corporation Founder, CEO	1997–Present
Founded and built firm from self-funded research group to for-profit consulting firm with practice areas in cybersecurity and computer expert services. Some highlights include:	
<ul style="list-style-type: none">• Analysis of Data Loss Incidents Coauthored original research showing how data loss incidents take place broadly and per industry.	<i>Research</i>
<ul style="list-style-type: none">• High-Profile Incident Response and Security Assessment Led external assessment teams for a data loss incident at the Ohio Administrative Knowledge System (OAKS), a large-scale ERP system for the entire State government.	<i>Consulting</i>
<ul style="list-style-type: none">• Enterprise Data Encryption Provided technical expertise to multibillion-dollar retailer developing cryptographic controls for the protection of cardholder and other sensitive information.	<i>Consulting</i>
<ul style="list-style-type: none">• Sony “Rootkit” Digital Rights Management Served as technical consultant to plaintiff’s counsel in civil proceedings over the 2005 DRM released on Sony Music CDs.	<i>Litigation Consulting</i>
<ul style="list-style-type: none">• Pharmatrak Privacy Litigation Assessed Web traffic analysis system for civil privacy litigation and provided opinion used by the U.S. Court of Appeals for the First Circuit to establish precedent on the application of Federal wiretap statutes to Web technology.	<i>Expert Testimony</i>
The Ohio State University, Department of Computer Science and Engineering	1998–2014
<ul style="list-style-type: none">• Sr. Lecturer Taught the CSE 4254 semester-long course “Programming in Lisp,” giving students with experience programming an understanding of the Common Lisp programming language.	2013–14
<ul style="list-style-type: none">• Lecturer Taught the CSE 459.31 course “Programming in Lisp,” intended to give students a basic understanding and familiarity with the Common Lisp programming language. Taught the CIS 662 course “Operating Systems Laboratory,” a course on the design and implementation of operating systems, where students build their own operating systems code. For graduate students and majors focusing in operating systems.	1999–2012

- Senior Systems Developer/Engineer 1998–2000
Lead department software development efforts, maintain open source software, and provide technical assistance throughout the department in systems, software, and documentation. Instituted department software development process. Provide technical and career mentoring to other staff members.
- Original Faculty Advisor of student groups Buckeye Privacy Coalition and Open Source Club.

Megasoft Online Chief Scientist 1996–1998

Provided technical leadership to Megasoft's development, engineering, and Information Systems groups in areas ranging from system and network security to design, implementation, and management of distributed software.

Led research efforts that improved the *Web Transporter* product's scalability, reliability, and security. Developed new cryptographic protocol to allow HTTP caches to work normally without sacrificing the security of encrypted links. Also designed and led the implementation of the LDAP directory interface for *Web Transporter*.

Fahlgren Inc. Chief Hacker 1996

Acted as technical resource for Interactive Design Group and Information Systems. Worked with Web site design group, providing expertise in Web site design, and technical issues related to site management and engineering. Also responsible for design and implementation of Fahlgren's Internet firewall.

AT&T Bell Laboratories Contractor 1995–1996

Worked with the Internet gateway group responsible for providing Internet connectivity to AT&T throughout the entire world, providing expertise in the areas of security, large scale system administration, and Internet software development. Led efforts to redesign and implement the third generation of the AT&T firewall and automate the handling of work for att.com postmaster functions. Consulted to other business units in need of such expertise.

Largely responsible for the security of some of the most busy sites on the Web, including AT&T, Disney, and others.

Transamerica Real Estate Tax Service Ohio Division Data Processing Supervisor 1993–1995

Responsible for oversight of entire Ohio Division data processing operation, including management of DP and data

entry staff. Also served as a technical resource and systems software developer for the corporate internal software development group.

Books and Chapters for Books

- *Brute Force: Cracking the Data Encryption Standard* (Copernicus Books, 2005)
Discussion of first public brute force crack of a message encrypted with the (then) U.S. Government standard for data encryption, DES, a 1997 project led by Rocke Verser, Matt Curtin, and Justin Dolske.
- *Developing Trust: Online Privacy and Security* (Apress, 2001)
Discussion of privacy as an aspect of data security, case studies, and guidance for application developers to build systems that are more trustworthy, protecting privacy by design instead of only by policy.
- *The CPA's Guide to Information Security* (For AICPA by Kent Information Services, 1998)
Authored a chapter on secure networking and contributed technical material for a chapter on cryptography.
- *UNIX Unleashed, Internet Edition* (SAMS, 1997)
Authored chapters 17 and 19 in part, covering development of secure Web-based software using the Common Gateway Interface and the Perl programming language.

Refereed Papers and Formal Conference Work

- *Standardizing Breach Incident Reporting: Introduction of a Key for Hierarchical Classification*
Work-in-Progress paper in *Proceedings of the Systematic Approaches to Digital Forensic Engineering*, 2010. Coauthored with Lee T. Ayres and Thomas A. Ng.
- *Using Science to Combat Data Loss: Analyzing Breaches by Type and Industry*
In *I/S: A Journal of Law and Policy for the Information Society*, Volume 4, Issue 3, Winter 2008–09. Presentation of taxonomy to classify data loss incidents and study identifying the relationships between data loss types and industries.
- INFOSEC Forum VII General Chair, May 2005
Leading effort to present the seventh central Ohio INFOSEC Forum, with specific focus on developing more rigorous program content and broadening draw to state-wide.

- INFOSEC Forum VI General Chair, November 2004
Leading effort to present the sixth central Ohio INFOSEC Forum, with specific focus on developing more rigorous program content and broadening draw to state-wide.
- PrivacyCon 2003 Program Committee
Member of program committee for The Ohio State University Technology Policy Group (TPG) conference on privacy issues.
- LISA 2001 Program Committee (Reader)
Participated in review, commentary, and publication recommendation process for USENIX Large Installation System Administration conference (2001).
- *Pelendur: Steward of the Sysadmin*
In the Proceedings of LISA 2000. Overview of the design and implementation of the system for managing user accounts and department workflow developed at Ohio State's CIS department starting in 1998.
- *Shibboleth: Private Mailing List Manager*
In the Proceedings of the 9th USENIX Security Symposium. Description of a system for managing private and secure mailing lists in insecure environments.

Expert Testimony

- *State of Ohio v. Clay Hooper*, Court of Common Pleas of Perry County, Ohio, Case No. 14-CR-0037
2014-15
For defense counsel I analyzed the State's reports of forensic computer examination, performed independent analysis, and authored a report.
- *Meadowbrook, Inc. v. Kyle Biddinger, et al.*, United States District Court, Southern District of Ohio, Eastern Division, Case No. 1:14-cv-01374
2014-15
On behalf of Plaintiff's counsel, I examined computer data and completed a report of forensic analysis.
- *State of Ohio v. Charles E. Thomas*, Court of Common Pleas of Franklin County, Ohio, Case No.: 14 CR 004625
2014-15
Addressed questions regarding operation of peer-to-peer software *µTorrent* and relevant computer terminology in the form of an affidavit.

- *State of Ohio v. Michael McVey*, Court of Common Pleas, Jefferson County, Ohio, Case No.: 13-CR-228 2014–15

Evaluated reports offered by the State and data in relevant items in the prosecution of the superintendent of Steubenville City Schools. Provided affidavits and expert reports before all charges were dismissed by the State.
- *Shayne E. Thomas v. Lynn O. Radabaugh, et. al.*, Common Pleas Court of Seneca, Ohio, Case No.: 13CV0230 2014

Assessed availability of electronically stored information in an electronic discovery dispute.
- *St. Joseph Health System Medical Information Cases*, Superior Court of the State of California, County of Orange, Judicial Council Coordinated Proceeding No. 4716 2013–Present

For Plaintiff’s counsel I assessed data and testimony in connection with a data breach. I have offered a Declaration in the matter and have been deposed.
- *Champion Foodservice, LLC v. Vista Food Exchange, Inc., et al.*, United States District Court, Northern District of Ohio, Eastern Division, Case No. 1:13-CV-1195 2014–Present

For defense counsel I analyzed computer data and submitted a report and was deposed.
- *Douglas Lowe, et al. v. Allstate Property & Casualty Insurance Company, et al.*, Court of Common Pleas, Washington County, Ohio, Case No. 13 OT 13 2013–14

On behalf of plaintiff’s counsel I examined a mobile phone and gave a deposition regarding its data and interpretation.
- *State of Ohio v. Brandt Cook*, Municipal Court, Delaware, Ohio, Case No. 13CRB01400 2014

Engaged by counsel for the defendant, I examined images from a mobile phone and appeared at a hearing to address questions from counsel and the Court on the interpretation of electronic image data.
- *State of Ohio v. Michael E. Thomas*, Court of Common Pleas, Hancock County, Ohio, Case No. 2012 CR 286 2013–14

I examined a digital video recorder (DVR) unit connected to electronic video evidence and directed the effort to extract video from the broken storage device. I submitted an affidavit and testified at trial.
- *Paracap Group LLC, et al. v. Charles Crowley, et al.*, FINRA Dispute Resolution, FINRA-DR ARB. NO. 13-00584 2013–14

For Complainant’s counsel I analyzed computer systems to locate confidential information. I drafted a report in the matter and presented at an arbitration hearing.

- *Sue A. Farley et al. v. Complete General Construction Co., et al.*, Court of Common Pleas of Franklin County, Ohio 12 CV 012394 2014

For Plaintiff's counsel I analyzed a mobile phone and related records regarding activity during a period of time critical to the litigation. I submitted a letter stating findings and was deposed.
- *Flairsoft LTD., v. Yogesh Khandelwal, et al.*, Court of Common Pleas of Delaware County, Ohio, 11-CV-H-09-1107 2013–Present

For defense counsel I have analyzed the record regarding computer data and source code, and submitted affidavits.
- *H&H Industries, Inc. v. Erik S. Miller*, United States District Court, Southern District of Ohio, Eastern Division, Case No. 2:13-cv-907 2013–14

For plaintiff's counsel I examined computer systems and data to locate confidential information. To date I have submitted reports, been deposed, and appeared at hearings.
- *Robert A. Brown, et al. v. Tellermate Holdings Ltd., et al.*, United States District Court for the Southern District of Ohio, Eastern Division, Case No. 2:11-cv-1122 2013–Present

For plaintiff's counsel I assessed the ability to conduct electronic discovery of a cloud-based customer relationship management (CRM) system. To date I have completed reports and appeared in hearings.
- *Juana Curry and William Moore, et al. v. AvMed, Inc., d/b/a AvMed*, United States District Court For the Southern District of Florida, Case No. 10-cv-24513-JLK 2013

For plaintiff's counsel I determined costs associated with the selection and deployment of appropriate cryptographic controls to protect medical information.
- *Leland Small, et al. v. BOKF, N.A.*, United States District Court for the District of Colorado, Civil Action No. 13-cv-01125-REB-MJW 2013–Present

For plaintiff's counsel I assessed testimony regarding the type and availability of records, executed a declaration regarding the computability of a formula, and provided testimony in a deposition.
- *State of Ohio v. Matthew Fielding*, Court of Common Pleas, Franklin County, Ohio, Case No. 12 CR 2800 2012–13

I examined computer data on behalf of the defendant, provided a written report, and testified at trial.
- *Momentive Specialty Chemicals, Inc., v. Ricky Alexander*, United States District Court for the Southern District of Ohio, Eastern Division, Case No. 2:13-cv-275 2013

For plaintiff's counsel I assessed computer data and submitted documentation of my analysis.

- *State of Ohio v. James F. Morrison*, Court of Common Pleas, Delaware County, Ohio, Case No. 11CR-I-06-0302 2010–12

I examined computer data on behalf of the defendant, and provided an affidavit and testimony at the sentencing hearing.
- *Edward Haines, and Nyeta Haines, his wife v. Ann S. Mercer, M.D., Ann Shukri Mercer, M.D., P.A., State of New Mexico, County of Dona Ana, Third Judicial District, Case No. CV-2010-2273* 2012

For plaintiffs' counsel I have presented options to the Court for analysis of an electronic medical record.
- *Coast to Coast Health Care Services, Inc. v. Dawn Meyerhoffer and David G. Lovell, M.D. and Critical Access Solutions, Inc. and Daybreak Village, LLC and Tapestry Hospice, LLC, United States District Court for the Southern District of Ohio Eastern Division, Case No. 10-cv-00734* 2012–13

For plaintiff's counsel I analyzed computer data and submitted a report of my findings.
- *State of Ohio v. Stephen P. Harris*, State of Ohio, Warren County Common Pleas Court Criminal Division, Case No. 11CF27938 2011–12

For defense counsel I analyzed data and presented a report.
- *United States of America v. Matthew Howard Saffel*, United States District Court for the Southern District of Ohio, Eastern Division, Case No. 2:10-cr-00238 2010–11

For defense counsel I assessed data and provided an affidavit entered at the sentencing hearing.
- *State of Ohio v. Christopher J. Renkes*, Court of Common Pleas, Delaware County, Ohio, 10CR-I-04-0235 2011

I examined computer data on behalf of the defendant, provided a report, and appeared at trial.
- *State Farm Fire & Casualty Company v. Joseph Martin Radcliff, Coastal Property Management LLC, a/k/a CPM Construction of Indiana, Jacob Charles Piper, Reginald Rex Thoman, Eric M. Dieckman, Matthew P. Seaver, Ryan M. Murphy, and Michael Henderson*, State of Indiana, Hamilton County In the Hamilton Superior Court No. 1 2011

On behalf of the plaintiff, I analyzed electronic data from a mobile device and provided an expert report. I have been deposed in the matter.
- *Peoples Bank, National Association v. Robert Daniel Coffill, Jr.*, Court of Common Pleas, Fairfield County, Ohio 2010

On behalf of the plaintiff, I analyzed electronic information and provided an affidavit regarding key findings.

- *The Estate of John Hiotis, by and through Maria Hiotis v. 2600 Highlands Boulevard, North, LLC A/K/A 2600 Highlands Boulevard, North, LLC D/B/A/ Bay Tree Rehabilitation and Nursing Center; Florida Holdings III, LLC; Florida Administrative Services, LLC; Harborside Healthcare Corporation; Harborside Administrative Services, LLC; Sharon Harris; Samuel Politz; Alan Cooper A/K/A Alan Peter Cooper; Dennis Deshong; Daniel Frenden A/K/A Daniel L. Frended; Myra Marcum A/K/A Myra Joyce Marcum (as to Bay Tree Rehabilitation & Nursing Center)*, Circuit Court of the Sixth Judicial Circuit in and for Pinellas County (Florida), Case No. 08-2042-CI; Division 8 2010–11

On behalf of defense counsel, I reviewed discovery documents, discussed data management practices with staff, and submitted an affidavit.

- *John W. Ferron v. MetaReward, Inc., et al.*, United States District Court for the Southern District of Ohio, Eastern Division, Civil Action Nos. 2:09-cv-430, 2:09-cv-440, 2:09-cv-512, 2:09-cv-513, 2:09-cv-520 2009–10

For defense counsel I consulted on ESI and computer technology. I submitted an affidavit for the Court.

- *Robert Schmidt v. AT&T, Inc. and SBC Internet Services, Inc. d/b/a AT&T Internet Services, Inc.*, Court of Common Pleas, Cuyahoga County, Ohio, Case No. CV 2009 6887885 2010

This action is pending. For intervenors' counsel I submitted an affidavit as to my work in the matter of *Ford, Dunne, Bell, and Klorer v. SBC Communications Inc. and SBC Internet Services, Inc. d/b/a AT&T Internet Services, Inc.*, described below.

- *In re Mark A. Williams*, Ohio Department of Education Administrative Procedure 2009

For respondent's counsel I assessed computer data presented as evidence by complainant, presented a report, and testified at a hearing.

- *Gail Ford, Carrie A. Dunne, John E. Bell, and Patricia A. Klorer v. SBC Communications Inc. and SBC Internet Services, Inc. d/b/a AT&T Internet Services, Inc.*, Circuit Court of St. Louis County (Missouri) Cause No. 06CC-003325, Division No. 6 2008–12

This action is pending. For plaintiff's counsel I assessed computer data connected to the billing and delivery of broadband Digital Subscriber Line service. I have submitted an affidavit in the matter.

- *New York Stock Exchange Specialists Litigation*, U.S. District Court, Southern District of New York, 405 F. Supp. 2d 281 2007–Present

This action is pending. On behalf of plaintiff's counsel, I led the team that developed software to analyze New York Stock Exchange trading data to identify trades according to specifications of market experts. To date I have submitted two expert reports and have been deposed.

- *The Estate of Elizabeth Kiricenkov, by and through Rita K. Browning and George J. Kiricenkov, Co-Executors de son Tort v. Seminole Properties; Freedom Square Developments; American Retirement Corporation; A.R.C. Management Corporation; ARC Management, LLC; Robert G. Roskamp; Frank Herold; (as to Freedom Square Nursing Center)*, Circuit Court of the Sixth Judicial Circuit in and for Pinellas County (Florida), Case No. 05-008209-CI, Division 011. 2009

On behalf of plaintiff's counsel, I reviewed discovery documents and submitted an affidavit.
- *Doe v. Doe* (Confidential) 2007–09

For plaintiff's counsel, I performed an analysis of Web sites and computer data for evidence of the mishandling of information. I submitted a report, was deposed, and testified at a pre-trial hearing. Case dismissed in favor of plaintiff.
- *Estate of Marjorie C. Belcamino, by and through Bank of America, N.A. as personal representative v. Labarc, L.P., et al. (As to Homewood Residence at Freedom Plaza)*, Circuit Court of the Thirteenth Judicial Circuit in and for Hillsborough County (Florida), Case No. 06-CA-009706, Division A. 2009

On behalf of defense counsel, I reviewed discovery documents and submitted an affidavit.
- *United States v. Thomas Ballato*, U.S. District Court, Southern Ohio, 3:06CR192 2008

For defense counsel I assessed evidence brought by the government and submitted an expert report.
- *John W. Ferron v. Search Cactus, LLC, et al.*, United States District Court for the Southern District of Ohio, Eastern Division, Civil Action No. 2:06-cv-327 2008

For defense counsel I consulted on ESI and computer technology. I submitted two declarations for the Court.
- *Jesse Land, II, Paula Land and the Land Companies of Kentucky, LLC v. Farmers State Bank and Harvey Hensley, Owsley Circuit Court [Kentucky]*, Civil Action No. 05-CI-216 2008

For defense counsel, I led analysis of computer data for consistency with proffered testimony of parties to the litigation. I submitted two expert reports.
- *Chornyak & Associates Ltd. v. Richard D. Nadler, Everhart Financial Group, Inc. and R. Scott Everhart*, Franklin County [Ohio] Court of Common Pleas, 05 CV 011942 2005–08

Submitted reports on forensic analysis of a computer system to determine recent activity, conducted electronic discovery of defendants' systems, reported findings in writing, and provided testimony at trial.
- *City of Cuyahoga Falls v. Jamil T. Kazoun*, Cuyahoga Falls [Ohio] Municipal Court, 2007CRB00200 2007

Performed analysis of computer data and testified at trial regarding findings.

- *Justin Bunnell, et al. v. Motion Picture Association of America* 2007

Performed computer system analysis and submitted an expert report on behalf of the Bunnell parties and was consequently deposed. Technical issues at hand involved the analysis of email systems and networking.
- *State of Ohio v. Justin Blaney* 2006

Analyzed state's evidence around the issue of electronic contraband on behalf of the defendant. That analysis included examination of digital photograph data and operating system data. I provided an expert report and in-court testimony in a pre-trial hearing on the admissibility of certain digital evidence.
- *Frank E. Bellamy, Sr. v. Robert G. Montgomery, et al* 2005

Led the forensic analysis of computer system and rendered opinion regarding the system's rôle in the creation of a printed message. The analysis included reconstruction of data intentionally "wiped" to destroy evidence.
- *Pharmatrak Privacy Litigation*, United States Court of Appeals, First Circuit. 329 F.3d 9 2001–03

Led electronic discovery and forensic data analysis for plaintiff's counsel of Pharmatrak's systems to determine whether and how personal information was intercepted by a third party. Opinion used by the Court to establish precedent on the application of the Electronic Communications Privacy Act (ECPA) to Web technology.
- *RIAA v. MP3Board.com* 2001

Provided a technical expert report on behalf of MP3Board.com, an Internet search engine in its defense against the Recording Industry Association of America and was cross-examined by RIAA counsel.
- *Avenue A Privacy Litigation* 2001

Performed technical analysis of Avenue A electronic advertising systems and provided an expert report on behalf of plaintiff in this early online privacy litigation.

Presentations

When Cryptography is Outlawed Philosophy 1337, Guest lecture in the Department of Philosophy at The Ohio State University, April 8, 2014.

Columbus, Ohio

Discussed surveillance of citizens, access and use of cryptography as a countermeasure in the context of the mid-1990s “Crypto Wars,” as seen retrospectively after revelations of NSA’s domestic surveillance programs.

Putting the Science in Computer Science: Applications from Boardrooms to Courtrooms

Franklin University, March 26, 2014.

Columbus, Ohio

Showed the application of computer science to important problems in management and dispute resolution for students in the Choose Ohio First scholarship program.

Cracking the Code Hawken Middle School, January 30, 2014.

Cleveland, Ohio

Discussed the development and operation of a large-scale distributed computing system from idle cycles of computers to find the key needed to read an encrypted message.

Big Data Panel Discussion Columbus Chapter of the International Legal Technology Association, November 7, 2013.

Columbus, Ohio

Discussed issues with “big data” in the context of litigation with litigation support professionals as part of a panel.

Mobile Devices: Evidentiary Gold Mine or Empty Mine Shaft?

Columbus Chapter of (ISC)², October 14, 2013.

Columbus, Ohio

Presented uses and applications of data recovered from mobile devices in the context of adjudication at a training event for information security professionals.

Putting the Science in Computer Science Keynote Talk, Midwest Consortium for Computing Sciences in Colleges Conference, September 20, 2013.

Findlay, Ohio

Showed the application of computer science to important problems in management and dispute resolution for students and instructors of computer science.

Data Analysis to Find Fraud Ohio Association of Student Financial Aid Administrators, Spring Conference, May 7, 2013.

Columbus, Ohio

Discussed the issue of fraud particularly in connection with student loans and how data analysis can help to identify fraud more effectively and at lower cost.

Building and Maintaining Incident Response Capability Central Ohio INFOSEC Summit, May 3, 2013.

Columbus, Ohio

Copresented with Keith Fricke how an organization can respond effectively to information security incidents. Showed the factors leading to success in the development and maintenance of those programs.

ESI in Employment Litigation Ohio Management Lawyers' Association, April 19, 2013.

Columbus, Ohio

Showed methods to address the management and use of electronically stored information in employment and labor disputes, including strategies to make electronic discovery in litigation more cost-effective.

Integrity in Digital Evidence: Rendering Judgment on an Electronic Record

Central Ohio Association of Criminal Defense Lawyers, February 27, 2013.

Columbus, Ohio

Discussed adversarial data analysis to identify weak and missing foundation in arguments made to the court presumably upon the basis of scientific analysis, as well as common scientific errors committed by investigators of digital evidence.

Cracking the Data Encryption Standard Telecommunications Systems Management Association, February 26, 2013.

Athens, Ohio

Presented the design and implementation of a large-scale computing capability to break a message encrypted with the U.S. Government standard for Data Encryption.

Discovery in the Cloud Ohio Bar Association CLE, December 13, 2012.

Columbus, Ohio

Copresented with attorney Mason Evans on the topic of conducting electronic discovery of Internet "cloud" services and use of the data in litigation.

Case Study in Incident Response Northern Ohio Chapter of InfraGard, December 7, 2012.

Cleveland, Ohio

Gave an inside look at identification and response to a security incident, showing lessons learned and how organizations can be better prepared to ensure effective incident response capability.

Applications of Open Source Software OpenSource Club at The Ohio State University, November 8, 2012.

Columbus, Ohio

Showed students how "open source" software—where source code is available—has applications beyond the word of hobbyist. Identified where expert analysis with detailed discussion of method benefits from the use of open source software.

Information Security in Law Firms Ohio Chapter of the International Legal Technology Association, November 8, 2012.

Columbus, Ohio

Participated in a panel discussion of information security and the specific issues that arise for law firms, highlighting critical concerns and strategies for addressing them.

Case Study in Incident Response Central Ohio Chapter of the Information Systems Security Association, October 12, 2012.

Columbus, Ohio

Gave an inside look at identification and response to a security incident, showing lessons learned and how organizations can be better prepared to ensure effective incident response capability.

Maintaining Security During a Crisis Contingency Planners of Ohio Annual Conference, October 15, 2012.

Columbus, Ohio

Copresented with Shawn Sines on how an organization in crisis adopting emergency modes of operation can maintain information security standards to avoid exacerbating a high-risk event.

Successfully Handling Data Breaches State of Ohio Cyber-Security Awareness Event, October 2, 2012.

Columbus, Ohio

Showed how data breach events can be handled successfully to ensure that disruption to the organization is no greater than necessary and that those affected can have their concerns addressed.

Compromise in the Cloud Central Ohio Information Systems Security Association, April 18, 2012.

Columbus, Ohio

Offered a case study on responding to an information security incident surrounding the compromise of a cloud-based service. Included discussion of challenges and opportunities in forensic analysis of remote systems.

Careers in Information Assurance University of Findlay, April 13, 2012.

Findlay, Ohio

Discussed career options within the field of information assurance, including paths in and playing to strengths to advance.

Electronic Medical Records and Off Site Interface OSHRM Winter Conference, March 9, 2012.

Columbus, Ohio

Copresented with attorney Greg Krabacher on the functional and liability concerns of medical records for the Ohio Society for Human Resource Management State Council winter conference. Included discussion of original format records compared to those produced by applications.

- Incident Response** Central Ohio Association of Corporate Council, February 28, 2012.
Columbus, Ohio
Discussed how organizations can prepare for and execute well during a security incident to contain and to limit the impact of an incident. Part of a data breach seminar.
- Analyzing ESI in Litigation** Central Ohio Association for Justice, January 17, 2012.
Columbus, Ohio
Showed attorneys how use of a computer expert offered new insights into electronic medical records at the basis of adjudication arising from claims of medical malpractice and related concerns.
- Defending Your Agency on the Internet and in the Courtroom** Cyber Security Symposium, State of Ohio, October 5, 2011.
Columbus, Ohio
Discussed security incidents in the context of the legal systems of chief information officers of agencies of the State of Ohio.
- Drilling to Perfect Data Incident Response** Ohio Network for Healthcare Information Assurance, September 22, 2011.
Columbus, Ohio
Showed how organizations can prepare for unplanned high-impact events such as security incidents for information assurance professionals in the healthcare industry.
- Defensible Forensic Collection** Ohio Chapter of International Legal Technology Association, September 12, 2011.
Columbus, Ohio
Presented to legal support professionals the elements of a defensible acquisition of data to be used for forensic analysis, showing both procedural and technical issues to address.
- Integrity in Digital Evidence** Ohio Judicial College, September 9, 2011.
Columbus, Ohio
Showed the use and interpretation of digital evidence for the annual conference of the Ohio Judicial College, focusing on how trial judges can identify gaps in foundation.
- Drilling to Perfect E-Discovery** Technology First Seminar, June 8, 2011.
Dayton, Ohio
Discussed the process of electronic discovery and the demands of the courts to ensure a good record, and how to use full-scale exercises to ensure effective capability.
- Cloud Computing: Navigating the Legal Fog** Ohio State Bar Association Annual Meeting, May 5, 2011.
Columbus, Ohio

Copresented with attorney Alan Wernick on the issues raised by cloud computing and how to address them. Moderated by attorney Karen Hockstad.

Persuasively Rebutting Opposing Experts' Opinions SEAK

National Expert Witness Conference, April 15, 2011.

Naples, Florida

Discussed how rebuttal testimony can be presented persuasively to experts in a wide variety of disciplines.

Electronic Health Records American Bar Association Business Law Section Spring Meeting, April 14, 2011.

Boston, Massachusetts

Participated in a panel discussion with attorneys looking at various aspects of electronic health records. Focused presentation on the nature of electronic information and how expectations may now be at odds with reality.

Making Best Use of Experts Guest Lecture, Case Western Reserve University School of Law, March 28, 2011.

Cleveland, Ohio

Discussed the use of experts with law students focused on criminal defense issues.

Health Care Incident Response HIMSS¹¹ Conference, February 22, 2011.

Orlando, Florida

Presented how to address response to security incidents in the context of healthcare at the HIMSS annual conference.

Data Breach: Staying Out of the Headlines Breakfast Club, Fisher College of Business at The Ohio State University, February 5, 2010.

Columbus, Ohio

Presented results of five-year study of reported data breaches and discussed implications for business leaders and information security practitioners.

Compliance in Privacy and Data Security: How to Avoid Liability Columbus Bar Association, December 14, 2009.

Columbus, Ohio

Copresented CLE seminar with Benita Kahn, Esq. on the intersection of law and technology of information security and privacy.

Using Science to Combat Data Loss Information Security Compliance and Risk Management Institute, University of Washington, September 16, 2009.

Seattle, Washington

Presented recent research using statistical analysis of breach data at seminar entitled "The Changing Environment of Information Security: Dealing with New Technologies, New Threats, and New Laws."

- The New Age Toolset** CIO Solutions Gallery, Fisher College of Business, The Ohio State University, August 12, 2009
Columbus, Ohio
Part of program “Security Summit: Challenges to Our Future State of Readiness,” discussing the rôle of scientific analysis of data in the management of corporate information technology.
- The State of Data Loss** IT Leadership Academy Value Studio 16, Florida State College at Jacksonville, August 6, 2009
Jacksonville, Florida
Part of program “The State of . . . : Where Are We Today, and Where Are We Going?” Discussed how and where data loss events occur, and how to prioritize defensive resources.
- Incident Handling: Sensitive Data Breach** Columbus CIO Forum, July 23, 2009
Columbus, Ohio
Part of panel discussion on information security for area chief information officers.
- Hands-On Incident Response Testing** RSA Conference, April 21, 2009
San Francisco, California
Presented work with Keith Fricke of the Cleveland Clinic Health System on preparing security incident response teams using drills.
- Using Science to Battle Data Loss** Multiple presentations of state breach notification laws and analysis of subsequently-available breach data.
American Bar Association Information Security Committee Meeting, July 29, 2009
Chicago, Illinois
RSA Conference, April 23, 2009
San Francisco, California
- Computer Science Education: Industry View** Franklin University, April 17, 2009
Columbus, Ohio
Part of panel discussion on the state of computer science education, its value and relevance to future careers in computer science and information technology.
- Implications of Litigation in Virtualization** CIO Solutions Gallery, April 1, 2009
Columbus, Ohio
Discussed issues arising from litigation on a panel discussion on virtualization of computing infrastructure. Part of program “Advancing Your Competitiveness in a Recessive Economy.”
- Uses and Limits of Forensic Data Analysis** Ohio Investigators Association, March 25, 2009
Columbus, Ohio

Led discussion of applications of forensic analysis of computer data, including case studies in criminal and civil matters.

Discovery Beyond Documents Defense Research Institute Medical Liability and Health Care Seminar, March 12, 2009

Lake Buena Vista, Florida

Presented a case study of computer database analysis in wrongful death litigation and methods to prepare for litigation involving electronic information.

Asking the Right Questions: Forensic Analysis of Data Alternatively entitled, "How to Make BlackBerry Data Hearsay." Multiple presentations of recent research work on forensic analysis of mobile phones, with a focus on BlackBerry devices.

Central Ohio InfraGard Members Alliance, January 28, 2009

Columbus, Ohio

Cleveland InfraGard Members Alliance, December 12, 2008

The Next Twenty-Five Years: Applications of Computer Science

Cleveland, Ohio

Franklin University TechConnect, January 26, 2009

Addressed the widely-held belief that information technology is changing so rapidly as to make technical education models obsolete.

Columbus, Ohio

Using Information to Focus Resources "When, Why, and How to use Computer Experts." Columbus Bar Association, December 9, 2008 and December 9, 2009.

Columbus, Ohio

CLE program on the use of computer experts in litigation.

E-Discovery and the Issues Related to Storage of Information

Delaware CIO Forum, December 5, 2008

Delaware, Ohio

Presented case studies on how electronically stored information (ESI) has come into scope of public records requests and litigation.

Electronic Evidence in Criminal Defense Columbus Bar Association, November 20, 2008

Columbus, Ohio

Discussed issues of data analysis unique to criminal defense attorneys, including critical analysis of law enforcement reports, and the use of experts for rebuttal or to prepare for cross-examination.

Electronic Discovery—Cleveland Clinic's Mock Exercise (Panel)

Cisco Systems Cleveland CSO Roundtable, November 18, 2008

Richfield, Ohio

Discussed three years' of incident response drills at the Cleveland Clinic Health System to prepare for security incidents and litigation events. Copresented with CCHS Chief

Information Security Officer Mark Dill and CCHS East Data Security Administrator Keith Fricke.

When to Hire a Computer Expert Witness Columbus Bar Association, November 14, 2008

Columbus, Ohio

CLE presentation on finding, retaining, and effectively using computer expert witnesses in litigation.

Hands-On Incident Response Testing Contingency Planners of Ohio Annual Conference, September 30, 2008

Lewis Center, Ohio

Presented work with Keith Fricke of the Cleveland Clinic Health System on preparing security incident response teams using drills.

Expert Witness Appearance (Mock Trial) ASTAR 2008 National Judge's Science School (JSS), Advanced Forensic Technologies, September 25, 2008

Columbus, Ohio

Acted as an expert witness discussing computer technology and findings from analysis of computer data relating to a computer intrusion in a mock trial.

Building a Successful Organization Capital Square Rotary Club, July 15, 2008

Columbus, Ohio

Discussed observations from experience in developing organizations that succeed in advancing their objectives and growing beyond the individual capabilities of the founders.

Hands-On Incident Response Testing Ohio Regional Information Security Conference, March 18, 2008

Dayton, Ohio

Copresented incident response drills with Keith Fricke of the Cleveland Clinic Health System.

A Taxonomy of Recent Data Losses Central Ohio ISSA, February 20, 2008

Columbus, Ohio

Copresented data loss incident research colleague Lee Ayres to a local group of information security practitioners.

Tech101: Electrons Are the New Paper Revised edition of earlier lectures on use of electronic information in adjudication.

July 14, 2008 CLE presentation for Dayton Bar Association

Dayton, Ohio

July 5, 2008 CJE presentation for Wisconsin Appellate Court Specialty Seminar

Pewaukee, Wisconsin

May 28, 2008 CLE presentation for Lake County (Ohio) Bar Association

Painesville, Ohio

- April 24, 2008** CLE presentation for Columbus (Ohio) Bar Association, marketed as “Paper As Obsolete: What Every Lawyer Should Know about Information Technology and E-Discovery”
Columbus, Ohio
- January 16, 2008** One-hour CLE presentation for Warren County (Ohio) Bar Association
Lebanon, Ohio
- November 28, 2007** Three-hour CLE presentation for Columbus (Ohio) Bar Association
Columbus, Ohio
- Confessions of a Plaintiff’s Expert** Toledo InfraGard Members Alliance, December 7, 2007
Toledo, Ohio
- Identity Management, Fraud, and Forensics in the 21st Century** CIOhio 2007, November 15, 2007
Columbus, Ohio
Discussed forensic computer analysis and its rôle in addressing misappropriation of intellectual property.
- Evolution of Backup Technology** 3X Seminar, November 13, 2007
Columbus, Ohio
Keynote presentation for 3X product launch, showing history of data backup and disaster recovery technology, challenges facing today’s IT managers, and solutions for the future.
- Intrusion Detection and Prevention Technology and Strategy** CIO Circle, November 7, 2007
Cincinnati, Ohio
Discussion of evolution of technology for intrusion detection and prevention systems (IDPS), its relationship with other security technologies, and limits of IDPS.
- Beyond Tabletop: Hands-on Incident Response Training** Information Security Summit, November 2, 2007
Independence, Ohio
Presentation on security incident response drills as training exercises at the Cleveland Clinic Health System, with Keith Fricke of CCHS East Region.
- The Rôle of Security in Clinical Informatics** Keynote presentation for the Central and Southern Ohio Chapter of HIMSS, November 2, 2007
Columbus, Ohio
Discussed how information security in clinical information systems supports good patient care.
- Handling Electronic Information** Ohio State Bar Association Midwest Labor Law Conference, October 26, 2007
Columbus, Ohio
Panel discussion with Susan Hastings from Squire, Sanders, and Dempsey LLP and Pam Krivda of the Krivda Law Offices.

- Consultant Residue** Third Annual Information Assurance Forum at the University of Findlay, October 24, 2007
Findlay, Ohio
Case study discussing the impact of data being brought into an ERP installation by a consultant from a previous ERP installation in the consultant's practice.
- The Cost of Misappropriation** Third Annual Information Assurance Forum at the University of Findlay, October 24, 2007
Findlay, Ohio
Case study involving the analysis of systems to identify information from employees' former employers and elimination of the data.
- Why Information Assurance?** Max M. Fisher College of Business at the Ohio State University, October 11, 2007
Columbus, Ohio
Lecture for visiting Chinese IT Executives on how an information assurance program supports enterprise risk management.
- TechTalk: Breach Notification** Central Ohio chapter of ISSA and TechColumbus, July 26, 2007
Columbus, Ohio
Discussion on data breach notification trends, strategies, and technologies.
- Computer Technology in Adjudication** Advanced Science and Technology Adjudication Resources (ASTAR) Conference, June 29, 2007
Columbus, Ohio
Lecture for regional judges' conference. Discussed electronic data storage and related issues for judges from eleven states.
- Tech101: How Computers and Data Work** Ohio State Bar Association (OSBA) Annual Convention, May 18, 2007
Cincinnati, Ohio
Discussion of the use of computers and electronic data in civil litigation in the context of new Federal Rules for Civil Procedure on electronic discovery.
- Addressing the Needs of Technology Education** itWORKS.OHIO Annual Conference, organized by the Ohio Department of Education, April 19, 2007
Columbus, Ohio
Part of panel discussion regarding technology jobs of the future and how the education system can prepare students for them.
- Forensic Computing: The Intersection of Law and Technology** Center of Science and Industry (COSI), March 26, 2007; October 30, 2007.
Columbus, Ohio

Discussion of forensic computing for high school students across the country, delivered over the Internet with H.323 link from Columbus.

Careers in Forensic Computing Columbus State Community College, November 17, 2006

Columbus, Ohio

Demonstration and lecture on computer science in a legal context for statewide conference for girls in grades 7–10 with an interest in careers in science and technology.

Careers in Cryptography Edison Community College, October 6, 2006; November 16, 2007

Piqua, Ohio

Demonstration and lecture on cryptography and its applications for pilot of statewide conference for girls in grades 7–10 with an interest in careers in science and technology.

Careers in Forensic Computing Edison Community College, October 6, 2006; November 16, 2007

Piqua, Ohio

Demonstration and lecture on computer science in a legal context for pilot of statewide conference for girls in grades 7–10 with an interest in careers in science and technology.

Cryptographic Protection of Data Warehouses Web presentation for NCR Teradata customers, August 3, 2006

Columbus, Ohio

Discussion of the protection of Enterprise Data Warehouse systems with cryptography.

Electrons are the New Paper Keynote Lecture, ASTAR Conference, May 19, 2006

Columbus, Ohio

Keynote lecture for the Ohio judges' Advanced Science and Technology Adjudication Resources (ASTAR) conference on computer science and related technology.

Computer Forensics: A Case Study of Data Analysis in a Criminal Trial

ASTAR Conference, May 19, 2006

Columbus, Ohio

Discussion of work in recent criminal defense as a case study for data analysis gone awry by investigators and overzealous prosecutors for the Ohio judges' Advanced Science and Technology Adjudication Resources (ASTAR) conference on computer science and related technology.

How the Internet and Cyberspace Works Presentation on fundamentals of Internet architecture and critical issues for analysis of data in legal proceedings. Presented to a variety of audiences.

May 18, 2006 ASTAR (Advanced Science and Technology Adjudication Resources) Conference,

Columbus, Ohio

May 17, 2006 INFOSEC Forum VIII, Central Ohio ISSA	Columbus, Ohio
April 25, 2006 itWORKS.OHIO Information Technology Educators Conference	Columbus, Ohio
April 21, 2006 Colorado Bar Association	Denver, Colorado
March 27, 2006 Greater Dayton IT Alliance Legal IT Peer Group	Dayton, Ohio
March 14, 2006 Greater Dayton IT Alliance D-RISC	Dayton, Ohio

Implications of Digital Rights Management The Privacy Foundation at the Sturm College of Law at the University of Denver, February 10, 2006

Discussion of Digital Rights Management systems including the XCP (“rootkit”) system shipped on some Sony CDs in 2005.

Denver, Colorado

Identity Theft Central Ohio ISSA, January 18, 2006

Panel discussion including other members of the Central Ohio ISSA on identity theft and related fraud, presented by TechColumbus and Platform Lab in Columbus.

Columbus, Ohio

Cryptographic Key Management Cedarville University Guest Lecture, September 8, 2005

Guest lecture for course on models for key management, including both centralized Public Key Infrastructure (PKI) and the decentralized PGP “web of trust” model.

Columbus, Ohio

Tales of a Forensic Computist Central Ohio InfraGard Members Alliance, August 2, 2005

Presentation giving personal experience on becoming a litigation consultant and expert witness as well as some recent casework.

Columbus, Ohio

Compliance in the Courtroom Security And Technology Online (SATO) Web conference, April 28, 2005

Part of panel discussing the intersection of law and technology. Specifically discussed the Pharmatrak Privacy Litigation and how the court used and interpreted data.

Columbus, Ohio

Observing hidden surveillance structures Computers, Freedom and Privacy (CFP 2005) conference, April 14, 2005

Panel discussion themed “Panopticon.” Discussed Web architecture and the side-effects of relevant protocols, database designs, and practices that affect the privacy of unsuspecting users.

Seattle, Washington

- Thinking About the Box** Keynote talk for itWORKS.OHIO conference, April 5, 2005
Columbus, Ohio
Keynote for teachers of technology programs in secondary and vocational schools throughout the state of Ohio. Discussed requirements for an educational system that prepared students for successful careers in technology.
- The Fall of the Data Encryption Standard** Greater Dayton IT Alliance, March 15, 2005
Dayton, Ohio
Discussion of the DESCHALL Project that broke a message encrypted with the Data Encryption Standard for the first time in 1997 and its impact on cryptographic policy in the United States.
- The Business Case for Security** Eastern Ohio Health Information Management Association, February 26, 2005
Independence, Ohio
Discussed how to balance business objectives and risks in light of the HIPAA Security Rule.
- Electronic Discovery** Columbus Bar Association Technology Committee, January 19, 2005
Columbus, Ohio
Discussion of electronic evidence and e-discovery issues.
- HIPAA Security: Making HIM Work** Ohio Health Information Management Association (OHIMA) fall Seminar, November 12, 2004
Columbus, Ohio
Discussion of how the HIPAA Security Rule affects health information management (HIM), along with strategies for achieving compliance.
- Wireless Security** Information Assurance Forum at the University of Findlay, October 28, 2004
Findlay, Ohio
Technical discussion of the IEEE 802.11 wireless networking standards and securing information in wireless networks.
- The Rise and Fall of the Data Encryption Standard** Information Assurance Forum at the University of Findlay, October 28, 2004
Findlay, Ohio
Presentation on the history of standardized encryption, exhaustive key-search attacks in general, and the ultimate defeat of the U.S. Government standard for data encryption, DES.
- Intrusion Detection Technology** Security And Technology Online (SATO) Web Conference, October 28, 2004
Findlay, Ohio
Considered strategies and tactics for identification and management of security events.

- Privacy in a Digital World** Privacy Foundation at the Sturm College of Law at the University of Denver October 22, 2004
Denver, Colorado
Discussion of how electronic infrastructures affect individual privacy.
- Strengthening Anti-Spam Defenses with Message Authentication** eWEEK's Anti-Spam eSeminar, September 20, 2004
Columbus, Ohio
Focused on the use of authentication mechanisms in present and possible future Internet email architectures.
- Spying on Spyware** Central Ohio ISSA, July 21, 2004
Columbus, Ohio
Presentation on identifying and managing spyware: dissecting how it works, motivations behind its creation, and discussion of my work in *In re Pharmatrak Privacy Litigation* and how that has affected the legal standing of spyware.
- Security is Economics!** Security Work Group of the Infrastructure & Interoperability Subcommittee of the Supreme Court of Ohio Advisory Committee on Technology and the Courts, July 20, 2004
Columbus, Ohio
A high-level introduction to information security for the first meeting of the work group.
- Cyber & IT Workshop: Beyond Firewalls** "Protect Your Network from Intrusion," Security & Technology Online (SATO) Security Leadership Council, June 30, 2004
Columbus, Ohio
Panel discussion arguing for rational and strategic management of risks to information systems.
- Privacy & Data Governance Technology Landscape** International Association of Privacy Professionals, Privacy Futures Conference, June 10, 2004
San Francisco, California
Panel discussion on technology to enforce privacy policy and regulatory compliance.
- Planning to Fail: Continuing to Get It Wrong** Keynote lecture for Security Week at The Ohio State University, April 26, 2004
Columbus, Ohio
Argued that the present focus on treating security as a tactical matter is doomed to fail.
- Forensic Computing Process and Applications** Guest Lecture, University of Findlay, April 14, 2004
Findlay, Ohio
Discussion with information assurance class at the University of Findlay, covering investigative procedure, working with attorneys, handling digital evidence, and case studies.

- The Business Case for Security** Columbus Board of Realtors' Tech User Forum, March 23, 2004
Columbus, Ohio
Discussed how to balance business objectives and risks, with focus on small business.
- CTC Techtalk** "Identity Management—Strategic Security Lever and 5x ROI?," March 17, 2004
Columbus, Ohio
Panel discussion regarding identity management from IT and information security perspectives.
- HIPAA Security Rule Implementation** Seminar, March 9, 2004
Columbus, Ohio
A full-day seminar presented in coöperation with a practicing attorney with experience in Health Care regulation and administration. A standard-by-standard consideration of the Security Rule, how the technology is to be understood and integrated with policy and procedure.
- From the War Room to the Board Room** "Translating Between Information Security and Risk Management" (Panel Moderator). Central Ohio Chapter of the Information Systems Security Association, November 5, 2003
Columbus, Ohio
Moderated a panel discussion with chief security officers from large regional companies discussing integration of information security into operations and translating risk management objectives into strategy for information security practice.
- Confessions of a Hacker** Association for Computing Machinery Chapter at The Ohio State University, October 7, 2003
Columbus, Ohio
A discussion of computer science, the computing profession, and career development in computing technology. Included personal history and anecdotes for students to understand how to manage their own career growth.
- Introduction to HIPAA Security Rule and Risk Management** Cleveland Clinic Health System, August 7, 2003
Columbus, Ohio
Presentation and Q&A session with Security Teams covering the HIPAA Security Rule's main objectives and general mechanisms for achieving them, followed by a more detailed look at mechanisms for Risk Management in information systems.
- Information Security in Health Care** Children's Hospital, June 25, 2003
Columbus, Ohio
"Brownbag lunch" with HIPAA Security Rule implementors and stakeholders discussing INFOSEC's goals and how security can be built into operational processes.

- Forensic Computing for Computer Professionals** Seminar, June 16–17, 2003
Columbus, Ohio
Development and presentation of a two-day corporate training course in forensic computing. Covered handling of computer forensic investigations, filesystem and network technology. Led the course through a hands-on forensic challenge, extracting evidence from a disk image.
- Communication: The Key to Fraud Prevention** Emerging Trends in Fraud Conference, May 9, 2003.
Columbus, Ohio
Considered the problems in information systems auditing, how fraud examiners, auditors, and information systems experts must establish a common vocabulary and work together to combat fraud successfully.
- Computer and Network Security** InfraGard Panel for Columbus ITEC 2002, October 29–30, 2002
Columbus, Ohio
Discussion of computer security, with particular focus on corporations and what they can do to secure their infrastructures.
- Making the Case for CyberSecurity in Times of Austerity** Second Columbus INFOSEC Forum, October 23, 2002
Columbus, Ohio
Expert panel discussion of computer and network security: how to identify and to quantify its business value.
- Forensic Data Analysis** Northeast Ohio ISACA, October 17, 2002
Brecksville, Ohio
Consideration of the problem of forensic analysis with electronic and computer data.
- Security Vulnerability Assessments** Privacy2002 Conference, September 25, 2002
Cleveland, Ohio
Participated in a “how-to” panel, considering of live penetration tests, how they are performed, what can be expected, and which problems they do not solve.
- Getting to Know You** Privacy2002 Conference, September 25, 2002
Cleveland, Ohio
Discussed trends in surveillance technology, upsides and downsides for privacy and security online and offline. Covered surveillance technologies, biometrics, computer profiling, video, and wireless monitoring.
- Requirements for a Secure Infrastructure** Multiple presentations of a discussion of securing the U.S. information infrastructure against attack and proposal of set of requirements for a workable security plan.
Dayton, Ohio
Columbus, Ohio

Dayton InfraGard, September 18, 2002
Columbus InfraGard, November 25, 2002

Is Computer Security Possible? Columbus Computer Society,
May 22, 2002
Columbus, Ohio

Discussed the problem of computer security, specifically what computer security is, how privacy and security are related, typical security failures, and what can be done to improve security in computing. Argued that the best end-user defense against attack is awareness and mindset, and a demand for trustworthy systems from vendors.

Internet Security (An Overview) Central Ohio Craftsmen Club,
April 11, 2002
Columbus, Ohio

Consideration of how technology has altered the printing industry, what business requirements are present in Internet systems, and how the issue of security can be managed proactively.

Cryptography in Practice Central Ohio Chapter of InfraGard,
March 11, 2002
Columbus, Ohio

Discussion of cryptography, what it can and cannot do, and how it affects the ability to defend against attack and to perform forensic data analysis.

Assessing Risk in Information Systems Central Ohio Chapter of the Information Systems Security Association, March 6, 2002
Columbus, Ohio
Consideration of information technology, information theory, and risk management theory.

Getting Security Right Keynote Address at First Columbus INFOSEC Forum, February 21, 2002
Columbus, Ohio
Discussed the facets of information security, the requirements of businesses, and how INFOSEC managers can succeed.

Privacy and Security Gotchas Columbus Computer Society's Consulting SIG, January 9, 2002
Columbus, Ohio
Discussion of how side-effects can have unintended consequences when the technology is not fully understood.

The Relationship Between Privacy and Security Privacy By Design Conference, December 3, 2001
Montréal, Québec, Canada
Discussion of privacy failures in public Web-based services, based on research work of Interhack's Internet Privacy Project.

Computer System Security InfraGard panel at Columbus ITEC Show, October 30–31, 2001

Columbus, Ohio

Discussion of system security, particularly as it relates to resistance against widespread attack against the U.S. infrastructure.

Auditing Computers? Are You Serious? Central Ohio Chapter of the Information Systems Audit and Control Association, October 11, 2001

Columbus, Ohio

Consideration of requirements for system auditing and a review of current commercial technology's ability to address those requirements.

Dodging the Security Bullet Workshop at Privacy 2001 Conference, October 4, 2001

Cleveland, Ohio

Participated in workshop subtitled "Tools to Secure Business Data in a Competitive Environment," discussing tools and techniques available to enhance security in information systems.

Creating Your Business' Privacy Policy Privacy 2001 Conference, October 3, 2001

Cleveland, Ohio

Participated in workshop addressing the problems in privacy, how business needs must include consumer privacy, and how to find the define the right policy for the organization.

CyberCrime in the Workplace Panel in the 10th Annual Ohio Employment Law Conference, May 9, 2001

Columbus, Ohio

Discussion of the rôle of good business process specification and system design in managing risk in the workplace, especially with regard to criminal activity online.

Internet Security: Are We Ever Going To Get It Right? Keynote presentation at InterLab 2000 Conference,

Los Alamos, New Mexico

Keynote presentation on information security in computing technology delivered in Los Alamos and broadcast to other National Laboratories around the United States.

Banner Advertising Networks A detailed discussion of how Web-based banner advertising services work and how they are used to violate the privacy of unsuspecting Web users. Presented for various private clients and organizations at The Ohio State University.

New York, New York

Columbus, Ohio

Articles

Using Electronic Stored Information *Columbus Bar Lawyers Quarterly*, Spring 2008

Article for publication of the Columbus (Ohio) Bar Association describing the fundamentals of electronic information.

Introduction to Forensic Computing *Control*, May 2006

Feature article for the journal of the Information Systems Audit and Control Association (ISACA) introducing forensic computing through three brief case studies.

The Road to HIPAA Security Rule Compliance *Security, Technology & Design*, November 18, 2004

Article written with attorney Peter M. Hazelton introducing information security practitioners to the HIPAA Security Rule.

Security is a matter of guns and butter *Healthcare IT News*, November 2004

Published interview by editor Jack Beaudoin, discussing information security strategy and the economics behind effective information security.

New HIPAA rule requires rugged security framework *BusinessFirst* (Columbus), October 15, 2004

Article written with attorney Peter M. Hazelton on the Health Insurance Portability and Accountability Act (HIPAA) Security Rule, with focus on building information security programs for regulatory compliance.

Consumers should demand security when using Internet *Columbus Dispatch*, January 28, 2002

Discussion of the problem with Internet security and how consumers can improve security.

Hackers Lovebugs & Saboteurs: Who'll Protect Your Computers? *Columbus CEO*, Roundtable, November 2000

Published discussion with five other experts, which ran as an article.

Preserving Integrity *WebTechniques*, May 2000

A discussion of secure programming practices, especially as they relate to the Web.

On Guard *WebTechniques* April 2000

Describing the essentials of Web site security to site builders.

Electronic Snake Oil ;login:, April 1999

How non-cryptographers on identifying likely bad cryptography products.

A Brute-Force Search of DES Key Space ;login:, May 1998

Described the technical workings of the DESCHALL project.

Write Once, Run Anywhere: Why It Matters An essay on the importance and the achievability of the goal of having software work on any type of computer. Featured on Sun's <http://java.sun.com/> Web site in January 1998.

PreText Magazine 'Forum' November 1997

Took part in a forum discussing individual consumer privacy vs. the needs of advertisers and marketers with a number of other experts in privacy, security, and marketing.

*Technical Reports***Analysis of Compact Disc Digital Rights Management** Interhack

Technical Report. Detailed analysis of various systems intended to prevent duplication of audio CDs, including alteration of disc geometry to take advantage of differences between audio CD players and CD-ROM drives.

Anatomy of Online Fraud: How Thieves Targeted eBay Users but Got Stopped Instead

Interhack technical report. Analysis of an online fraud scheme, how Internet technology was used to support the scheme, how the fraud was identified, reported, and halted.

Spector Professional Review and Commentary Interhack technical report. Analysis and discussion of "spyware" product Spector Professional. Discovered and documented hidden backchannel.

Comments on Guidelines on Securing Public Web Servers

Interhack technical report. Review and discussion of NIST draft document, *Securing Public Web Servers*. Covers Web security, drawing from such domains as information security, networking, software, and cryptography.

PCFriendly Enables DVD Backchannels Interhack technical report.

Analysis of popular Web-enabled DVD titles and privacy implications of "Internet" features, including discovery of surreptitious backchannel and analysis of data uploaded.

Bank One Online Puts Customer Account Information at Risk

Interhack technical report. Review and technical analysis of the design and implementation of an online banking application. Consideration of weaknesses, how they could be avoided, and how nonpublic customer information can be better protected.

A Failure to Communicate: When a Privacy Seal Doesn't Help

Interhack technical report. How a popular Internet privacy seal proprietor allowed a third party to monitor its site's visitors' activity on its Web site. Widely reported in the US media.

Getting to Know You (Intimately): Surreptitious Privacy Invasion on the E-Commerce Web

Interhack technical report. Discussion of the privacy ramifications of a third-party site usage analysis service and describing how four Internet retail sites' use of the system violated their privacy policies. Widely reported in nationwide print, radio, and television media.

Siralos: Xinu for Unix In progress. Description of the design and implementation of a UNIX runtime library that provides XINU-style system interfaces. Used in CIS762 at Ohio State's CIS department.

DoubleClick Opt Out Protocol Failure == Opt In

Interhack Technical report. How a failure to follow the HTTP protocol caused a popular Internet advertising service to ignore some "opt out" requests silently.

Opting In, By Accident Interhack technical report. How Netscape Communicator's handling of cookies can cause Web users who have "opted out" of advertising networks to be "opted in" again without their knowledge.

Why Anti-Virus Software Cannot Stop the Spread of Email Worms

Interhack technical report. Early consideration of malicious software ("malware"), analysis of the problem, and presentation of a strategy for addressing the risks.

Creating an Environment for Reusable Software Research: A Case Study in Reusability

Ohio State University Department of Computer Science and Engineering Technical Report OSU-CISRC-8/99-TR21. How applying the principles of reusable software to develop an environment for software research reaped a large reward.

"What's Related"? Everything But Your Privacy Interhack technical report. Exposed serious potential for privacy violation in Netscape's "smart browsing," which received publication

in Privacy Forum Digest, RISKS Digest, various Web marketing conferences, and widely through the German-language parts of Europe. Cited in a number of university courses in the US and at the “Cyberspace and Privacy” Symposium at Stanford Law School.

Firewalls FAQ Usenet Periodic Posting. Coauthored this official Usenet FAQ, archived around the Internet, and republished widely.

Snake Oil FAQ Usenet Periodic Posting. This monthly Usenet posting is widely recognized as the authoritative document on common practices among bogus cryptography products. Republished widely and used in courses at several universities.

Memberships

- Central Ohio InfraGard Members Alliance, Coordinated by Federal Bureau of Investigation.
- International Information Systems Security Certification Consortium (ISC²).
- American Radio Relay League (ARRL).
- Central Ohio Amateur Radio Emergency Services (COARES).
- Central Ohio Traffic Net (COTN), a part of the Ohio Section of the National Traffic System. Net Manager, 2014.
- FBI Cincinnati Citizens Academy Alumni Association

Certifications, Licenses, and Qualifications

- Certified Information Systems Security Professional (CISSP).
- Community Emergency Response Team (CERT), Franklin County, Ohio Emergency Management Agency & Homeland Security.
- Amateur Radio, KD8TTE.
- American Radio Relay League (ARRL) Official Relay Station (ORS).
- American Radio Relay League (ARRL) Official Emergency Station (OES).
- General Mobile Radio Service (GMRS), WQOV722.
- FEMA ICS 100, IS 700.

Languages

English (U.S. Native) and Russian (Student).

Education

Eastland Career Center, Electronic Data Processing, 1989–91.
Studied data processing, including COBOL, RPG-II, BASIC, OCL,
System/3x operations, accounting, and business.

DOCUMENT SOUGHT TO BE SEALED

**EXHIBIT K
REDACTED
IN FULL**

EXHIBIT L

1
2 UNITED STATES DISTRICT COURT
3 FOR THE NORTHERN DISTRICT OF CALIFORNIA
4 SAN JOSE DIVISION
5

6 In Re Google, Inc., Privacy Policy Litigation.

Case No. 5:12-cv-01382

7 REPORT OF FERNANDO TORRES ON
8 THE DAMAGES TO PLAINTIFFS
9 FROM GOOGLE'S VIOLATIONS OF
10 ANDROID USERS' PRIVACY RIGHTS

11 Date: March 12, 2015
12
13
14

15 I, FERNANDO TORRES, declare and state as follows:

16 1. I have been retained as an expert by attorneys for Plaintiffs to consult concerning the
17 factual and damages issues presented in the above case. Specifically, I have been tasked with
18 analyzing the economic damages due to Defendant Google, Inc.'s ("GOOGLE") breach of the
19 privacy policies and other contracts that govern the rights of Android Users during the Class
20 Period (February 1, 2009 to May 31, 2014).

21 2. I am a professional economist and have over 30 years' experience in applied and
22 theoretical economics. In the course of this experience, I have been a consultant, a professor,
23 and a business manager. Both my undergraduate and post-graduate degrees are in economics,
24 the latter with a concentration in econometrics. Since 2004, I have specialized in the analysis
25 and valuation of intellectual property and intangible assets. I am a member and Chief
26 Economist at IPmetrics LLC, an intellectual property consulting firm. Appendix A, attached
27 hereto, contains a copy of my most current curriculum vitae setting forth in detail my
28

1 qualifications and experience, as well as list of all publications authored in the previous 10
2 years.

3 3. Moreover, I have served as a consultant on numerous projects involving the
4 determination of the value of intellectual property, including patents, trademarks, and rights of
5 publicity. I have trial and deposition experience as an expert witness representing both
6 plaintiffs and defendants. I have experience determining damages in complex commercial
7 litigation cases nationally, including a class action case. I currently consult with and have
8 consulted with clients in California, New York, Texas, Colorado, Iowa, and Florida. Appendix
9 B, attached hereto, contains a listing of my testimony-related experience for the past four years.

10 4. In the course of this engagement, I have conducted research relying on publicly
11 available information. After reviewing and analyzing the material available to me and after
12 conducting further research surrounding the relevant issues, I have come to the findings and
13 conclusions that are addressed in the following paragraphs including, beginning with general
14 considerations and proceeding to examine specific issues of the case at hand. The facts and data
15 considered in forming the opinions are identified where referenced in the text and footnotes that
16 follow.

17 5. **Background.** — This case is a class action against GOOGLE on behalf of all persons
18 and entities in the United States that purchased at least one paid Android application through
19 the Android Market and/or Google Play Store between February 1, 2009 and May 31, 2014 (the
20 “Android App Disclosure Subclass”).¹

21 6. GOOGLE acquired Android, Inc. in the fall of 2005,² and the first commercial version
22 of the Android operating system software (Android OS) was released on September 23, 2008.³
23 The stated goal was for the partners of the “Open Handset Alliance” to begin developing a new
24
25

26 ¹ *Third Amended Complaint* at §1.

27 ² Elgin, Ben (August 17, 2005). *Google Buys Android for Its Mobile Arsenal*, Bloomberg Businessweek.
www.webcitation.org/5wk7slvVb).

28 ³ Dan Morrill (September 23, 2008), *Announcing the Android 1.0 SDK, release 1*, Android Developers Blog
(android-developers.blogspot.com/2008/09/announcing-android-10-sdk-release-1.html).

category of mobile hardware and software products.⁴ Several handset manufacturers immediately adopted this platform, which is distributed under royalty-free, open-source based licensing.⁵ During the past few years, the Android OS has continued development, is now distributing version 5.0, and has been widely adopted in mobile communications. According to public information from GOOGLE, the Android OS "...powers hundreds of millions of mobile devices in more than 190 countries around the world. It's the largest installed base of any mobile platform and growing fast—every day another million users power up their Android devices for the first time and start looking for apps, games, and other digital content."⁶

7. GOOGLE requires that users of Android devices create an account to access Google Play (formerly known as the Android Market), which is the primary service through which Android users purchase or otherwise acquire apps for their devices.⁷ At all times during the Class Period, GOOGLE agreed that it would not disclose personal information of Android Users to third parties except under limited circumstances (for example, "as necessary to process your transaction and maintain your account"⁸).

8. **Alleged Damaging Act.**— Since approximately February 1, 2009, GOOGLE has subjected Android device users to injury by secretly and automatically disclosing to third-party application developers certain personal information of users that purchase applications through the Android Market/Google Play Store, without such users' authorization or consent.⁹ The disclosed information includes at least the name, email address, and physical or geographical location associated with the Google account and/or Android device.¹⁰ From an economic perspective, this breach of contract causes quantifiable damages to the members of the Subclass. Furthermore, to the extent this information disclosure may require transmission

⁴ The OHA is a group of 84 technology and mobile companies that have come together to accelerate innovation in mobile and offer consumers a richer, less expensive, and better mobile experience (www.openhandsetalliance.com/oha_faq.html).

⁵ A distinction is often necessarily made between the open-source Android OS, which developers can use as-is or develop derivative versions (technically "fork" the open-source Android project), and Google's proprietary applications, including the well-known Search, Gmail, Google Maps, etc. The latter are licensed separately by Google, Inc. under proprietary terms and conditions (Ron Amadeo (October 20, 2013), *Google's iron grip on Android: Controlling open source by any means necessary*. ArsTechnica.com).

⁶ Google, Inc. Android Developers website (developer.android.com/about/index.html, accessed March 4, 2015).

⁷ Complaint at §16.

⁸ Complaint at §137.

⁹ Complaint at §17.

¹⁰ Complaint at §17.

1 involving the Subclass members' mobile devices, there are additional unreimbursed costs
2 imposed on users.

3 9. From an economic perspective, the contract entered into forms one side of the two-
4 sided GOOGLE platform: GOOGLE provides internet-based services to attract consumers to
5 the platform, on the one hand, and on the other GOOGLE sells access to these consumers to
6 commercial entities like advertisers and, relevant here, mobile application developers.¹¹
7 Through the Android OS, the GOOGLE platform is extended from the stationary web-based
8 service to the growing inobile device-based environment of Android OS phones and devices.
9 Economically, this is a competitive necessity as an increasing proportion of consumers'
10 attention is directed to mobile devices, rather than traditional personal computers and
11 television.¹² The other side of GOOGLE's two-sided platform concerns GOOGLE's receipt of
12 revenues in exchange for access to information about Android Users, which in the case of
13 application developers takes the form of a percentage-based charge applied to all sales of
14 applications made through the Android Market/Google Play Store.

15 10. Without first obtaining users' authorization to do so, GOOGLE has, for the duration of
16 the Class Period, caused certain personal information of every Android OS user that makes an
17 app purchase through GOOGLE's Play Store¹³ to be disclosed to the application developer.¹⁴
18 The information thus disclosed is not necessary for the third party (that is, the app developers)
19 in processing the payment or for maintaining the user's account,¹⁵ and none of the other
20 specific conditions permitting disclosure to third parties seems remotely applicable in this
21 case.¹⁶

22
23 ¹¹ The two-sided market is well-known in Economics from the study of entertainment platforms that pre-date
24 internet-based platforms like GOOGLE's. See, *inter alia*, See, *inter alia*, H.L. Vogel, Entertainment Industry
25 Economics, 8th Ed., 2011, Cambridge University Press pp 337-339; and, S.P. Anderson and J. Gabszewicz, The
26 Media and Advertising: a Tale of Two-Sided Markets, in Handbook of the Economics of Art and Culture, Volume
27 1, Edited by V.A.Ginsburgh and D.Throsby, Elsevier, 2006, pp 567-614.

28 ¹² According to recent Nielsen findings, US adults spent on average 34 hours per month using the mobile internet
on smartphones. By comparison, they spend 27 hours on the PC internet (See: The U.S. Digital Consumer Report
(www.nielsen.com/us/en/insights/reports/2014/the-us-digital-consumer-report.html)).

¹³ Initially referred to as the Android Market.

¹⁴ *Complaint*, at §67.

¹⁵ *Complaint* at §128 *et seq.*

¹⁶ See: *Complaint* at §132-135.

1 11. In this report, I am assuming that the dissemination actions taken are considered as a
 2 breach of contract,¹⁷ and proceed to analyze the compensation for the consequent damages
 3 from an economic perspective. I understand that Plaintiffs in this case are entitled, under
 4 established California contract law, to monetary relief as a result of GOOGLE's invasion of
 5 their privacy interests, that is, their interest in not having their personally-identifying
 6 information – name, e-mail address and location – shared with third parties without their
 7 consent or authorization.

8 12. **Economic Analysis.** – The economics of this injury to the Subclass members' privacy
 9 interests can be analyzed from different perspectives, but the general context is that of the
 10 bargain that is struck between GOOGLE and the users of the Android services considered in
 11 this case; GOOGLE provides the Android platform and access to its services, including the
 12 Android Market/Play Store, as well as the payment tool Google Wallet, at no charge to users, in
 13 exchange for accessing user's information and activity under the terms of the privacy
 14 provisions of the corresponding services, namely, that no *personally identifiable* information
 15 will be shared with or sold to third parties except in limited circumstances (none of which is
 16 applicable here).¹⁸ Economically, this context involves two concepts: informational privacy is
 an economic good; and, there is a market for private information.

17 13. The personal information GOOGLE collects and disseminates in breach of the
 18 contracts at issue (name, email, location) is valued by and valuable to the users (the members of
 19 the Subclass in this case). Conceptually, information privacy is an individual's ability to
 20 control the collection and use of personal information.¹⁹ Explicitly, access to users'
 21 preferences, browsing history, and demographic characteristics is loosely understood as the
 22 user's end of the bargain to use GOOGLE services, but not the dissemination of personally
 23 identifiable information, which is much less associated with the rest of the user's activity
 24 profile. Thus, while the notion that, "If you are not paying for it, you are the product"²⁰ has to
 25 some degree been internalized by Internet users, they also perceive privacy invasions when

26 ¹⁷ *Complaint* at §271 *et seq.*

¹⁸ Summarizing the substantive allegations in the *Complaint*, specifically at §78 *et seq.*

¹⁹ See: I. Hann *et al.* "Overcoming Online Information Privacy Concerns: An Information-Processing Theory Approach" in *Journal of Management Information Systems*, Fall 2007, Vol. 24, No. 2, p 16.

²⁰ Popularized as a result of the user "revolt" arising from substantial changes to the Digg.com "free" service in 2010 (See: <http://www.metafilter.com/95152/Userdriven-discontent>).

1 they are not granted sufficient control on the solicitation, storage, use, and disclosure of
2 personally identifiable information.²¹

3 14. Therefore, as a direct consequence of the alleged breach of contract, personally
4 identifiable information of the members of the subject Subclass has been taken by GOOGLE
5 and communicated to undefined third-party application developers. The information has value,
6 and like all commodities in the marketplace, it has different value for different parties. Users
7 value the privacy of their information; GOOGLE and the developers value the information
8 because it can be leveraged to obtain advertising or other types of revenue. Because GOOGLE
9 has disclosed this information to the application developers, the members of the Subclass have
10 lost the sales value of that information that they otherwise would have had. In short, the
11 Subclass members have lost the opportunity to sell the personal information that GOOGLE
12 discloses to third-party application developers, the monetary value of which is at least as much
13 as the value that such third parties place on the information.

14 15. In addition, once the personally identifiable information is disseminated, out of both
15 the users' and even GOOGLE's control, its security is at risk to the extent third party
16 developers²² cannot be reasonably expected to guard the disclosed information with the
17 requisite level of data security that GOOGLE may have, but for which the developers do not
18 have resources. In fact, it is clear that even some of the largest and most sophisticated
19 companies have shown to be vulnerable to hacking attacks and to lose valuable, private and,
20 supposedly, secure information.²³ Finally, even if the information wrongly disseminated by
21 GOOGLE is deemed to be available to advertisers through other Internet services conceivably
22 used by the members of the Subclass, targeting advertising at a granular level can lead to data
23

24 ²¹ *Ibid*, p 17.

25 ²² I have not seen the list of third party developers that have received private information, but since the barriers to
26 entry into the Google Play store are low (a one-time \$25 dollar registration fee, and a Google account, is all that is
27 needed to publish an app and access the Google Play Developer Console
28 (<https://play.google.com/apps/publish/signup/>), I expect that the usual concentrated market, long-tail, distribution
prevails; with a few large publishers and a majority of smaller entities or even individuals with small portfolios of
applications.

²³ The recent breaches at Target Stores, Home Depot, Anthem – Blue Cross/Blue Shield, and even JP Morgan
Chase are salient examples of this risk (See also: <http://www.pcworld.com/article/2453400/the-biggest-data-breaches-of-2014-so-far.html>).

1 breaches in other platforms to the extent the name, email address and location pieces of
2 information narrow identification when cross-referenced in data banks, or exploited.²⁴

3 16. To objectively quantify the value of the privacy interests injured by the alleged
4 wrongful conduct in this case, attention must be paid to several dimensions of the consequences
5 of the breach at issue: (a) the information itself is an intangible commodity; (b) the Subclass
6 members have an interest in keeping the information private; (c) the information has potential
7 commercial value when used by third parties; and (d) the Subclass members incur incremental
8 costs²⁵ to cover the additional risks imposed by the unauthorized disclosures to parties with
9 whom the Subclass members do not have a privacy agreement. I have considered, researched,
10 and analyzed market prices for the various valuation approaches as follows:

- 11 a. The market value of the private, personally identifiable information that has lost
12 its private character is measurable by the prices paid for consumer email
13 databases for mass marketing purposes. This is a baseline, no-less-than value of
14 the wrongly disclosed information itself as the email information typically sold
15 for these purpose is unqualified (*i.e.*, it is unknown if the consumer is a suitable
16 target for the marketing campaign) and has problems of staleness (*i.e.*, the
17 information may be old and no longer valid).
- 18 b. The market value of the privacy interest in the information at issue can be
19 objectively measured by empirical means; based on experimental designs aimed
20 at quantifying the monetary amounts required to motivate individuals to disclose
21 personal information in an online setting in exchange for protection against
22 errors, improper access, and secondary use by third parties.
- 23 c. The market value of private information can be considered as having as another
24 reference the amount typically expected from leveraging of the information in
25 the market by the recipients of the information. Specifically, by reference to the
26 average (advertising) revenue per user Android app developers attain. The latter

27 ²⁴ See; A. Korolova, "Privacy Violations Using Microtargeted Ads: A Case Study", Journal of Privacy and
28 Confidentiality (2011) Vol. 3, No. 1 pp 27-49. Repository.cmu.edu/jpc

²⁵ Either insuring or implicitly self-insuring against these risks.

would, of course, not be rationally inclined to pay more for the information than the amount they expect to receive in revenue, and would likely aim to pay much less considering the likelihood of success of typical online advertising campaigns.

d. Considering the incremental risk associated with the dissemination of private, personally identifiable information to third parties, a measure of value is available considering the increased cost borne by the Subclass members in terms of the potential misuse of such information. In this regard, a portion of the Subclass may be reasonably expected to actively engage in monitoring future potential misuses, others may only incur basic, passive steps, and yet others may not take any action in response to the increased risk.

e. To the extent the transmission of Android users' private information takes place using the broadband access and consumes battery power from users' mobile handsets, the Subclass members suffer additional damages due to the cost of these resources.²⁶

17. Baseline Market Value – The cost of acquiring email addresses in specific zip codes, as stated above, is the minimum value of the private information disseminated by GOOGLE. The information at issue, moreover, is of higher quality than that typically sold for marketing purposes. The databases containing this type of information cannot represent to information purchasers that their contents are current, validated email addresses for individuals with sufficient resources to have active mobile phone service on sophisticated phones or mobile devices and that have spent money for premium applications for those phones and devices. Nevertheless, researching this market for email lists for marketing purposes, I found the market price to be in the range of \$0.015²⁷ for an unqualified list, to \$0.07 for residential consumers, to \$0.18 per name for a more specific list of recent movers and new homeowners per unique email

²⁶ *Complaint* at §18, §144.

²⁷ For example, I requested EMAILZIPCODE.NET for a quote for email addresses within a five mile radius of my business location and found that a database of 28,555 records would cost \$428.32, for an average per record of \$0.015 (emailzipcode.net/buyemailaddresses.php, accessed January 26, 2015).

1 address.²⁸ From this survey of the market, and given the considerations as to qualified leads,
 2 the most comparable proxy for the case at hand is the \$0.18 per name price. Putting aside any
 3 privacy value of the information (*i.e.*, the set of name, email, and location), this is an indication
 4 of its market value as an informational input for marketing purposes.

5 18. Android OS users, as most Internet users, are generally concerned about the potential
 6 disclosure and misuse of information collected while online or using applications on their
 7 mobile devices. To mitigate these privacy concerns, Internet companies offer privacy policies
 8 and technical protections. Generally, individuals' motivation to disclose private information
 9 results from incentives offered by online websites. The central incentive is adhering to privacy
 10 policies and, where applicable, regulations.²⁹ Other relevant mechanisms are financial (*e.g.*,
 11 discounts) and convenience incentives. In this context, the amount of the incentive necessary
 12 for the voluntary disclosure of private information has been the subject of several experimental
 13 studies that provide an objective measure of the monetary value of the privacy interest to the
 14 provider of the information: a threshold to overcome the objection to disclose.

15 19. One such study utilized experimental auctions, where participants put a dollar value on
 16 private information before revealing it to a group.³⁰ A clear outcome of those experiments was
 17 that the price demanded to reveal private information, while not significantly different between
 18 men and women, was strongly related to the difference between the individual's information
 19 and the perceived desirability of that private trait.³¹ The average prices demanded to reveal a
 20 particular piece of private information ranged from \$57.56 (age) to \$74.06 (weight).³² In this
 21 context, this study showing statistically significant results is particularly relevant to the case at
 22 hand in that it provides evidence of the trade-off between privacy and money: to overcome the
 23 user's interest in maintaining information as private, there is a measurable monetary threshold
 24 amount for which, on average, consumers will exchange that privacy.

25 ²⁸ I obtained these quotes from market leading firm Vista Print (<http://www.vistaprint.com/maillinglists.aspx>).

26 ²⁹ In the US, these regulations pre-date the wide spread use of the Internet, such as the 1974 Privacy Act, and
 notably include the 1998 Children's Online Privacy Protection Act and the 2003 California Online Protection Act,
 among others.

27 ³⁰ B. A. Huberman, E. Adar, L. R. Fine (Hewlett-Packard Labs), "Valuating Privacy" in: IEEE Security & Privacy,
 2005-09 (Digital Edition), IEEE Society, pp 22-25 (www.computer.org/csdl/mags/sp/2005/05/j5022-abs.html).

28 ³¹ The experimental auctions included private information on weight, age, salary, credit rating, and savings.

³² Huberman, et al, *op. cit.*, p 24.

20. Another empirical study investigated Internet users' monetary appraisal of private personal information.³³ Specifically, that experiment showed that outcomes such as monetary rewards are associated with positive motivation to disclose information to a website.³⁴ Generally, the statistically significant results imply that websites would need to offer substantial monetary incentives to overcome individuals' privacy concerns, regarding errors, improper access and unauthorized secondary use³⁵ of information.³⁶ The following table summarizes the results of the valuation of these three aspects of website privacy policy.

Table 1
Value of Privacy
Experimental Results³⁷

Web site privacy policy	Range of Value (US\$)	
Review for error	\$ 11.18	\$16.36
Restriction against improper access	\$ 11.33	\$16.58
Secondary use not allowed	\$ 7.98	\$11.68

21. According to this study among US subjects, protection against errors, improper access, and secondary use of personal information is worth between \$30.49 and \$44.62.³⁸ To apply these results to the case at hand, it would be appropriate to exclude the error protection from consideration and focus on the "access" and "unauthorized use" elements. Thus, in my opinion, a likely range of value for Subclass members' interests in the privacy of their personally identifiable information from unauthorized access and dissemination to third parties would be estimated in the range between \$19.31 and \$28.26.

22. Considering the economic rationale for GOOGLE to knowingly make available to third parties the private information obtained from the members of the Subclass, despite the provisions of the privacy policies and restrictions of the various services that collect and process that information in the first place (such as the general GOOGLE privacy policy and the

³³ I. Hann *et al.* "Overcoming Online Information Privacy Concerns: An Information-Processing Theory Approach" in *Journal of Management Information Systems*, Fall 2007, Vol. 24, No. 2, pp 13-42.

³⁴ *Ibid.*, p 27.

³⁵ Secondary use refers to the concern that information is collected for one purpose but is used for another, secondary purpose. *Ibid.*, p 19.

³⁶ *Ibid.*, p 29.

³⁷ *Ibid.*, Table 3, p 30.

³⁸ Adding the three components in the Table.

Google Wallet policies), it bears noting GOOGLE is already in possession of the information and can use it to generate advertising revenue. In fact, based on GOOGLE's publicly disclosed financial information, analysts estimate that between 2012 and 2014 during the period at issue, GOOGLE earns annual revenue of \$41.11 on average per user ("ARPU").³⁹ This amount reflects all lines of service and advertising outlets in the GOOGLE platform.

23. Defendant GOOGLE evidently uses the improperly disclosed private, personally identifying information to provide additional value to third party Android Developers as part of the Play Store services. GOOGLE participates in the revenue derived from paid apps and in-app purchases performed using the Google Wallet platform. As part of the value proposition GOOGLE makes to Android Developers, in exchange for a 30% participation in the paid-app and in-app purchase revenue,⁴⁰ Android Developers received direct access to Plaintiffs' and the other Subclass members' private, personally identifying information during the Class Period. This disclosure, although breaching the user privacy agreements which are the subject of this case, adds value to the further expansion of the Android market, its attractiveness for developers, and thus supports the expansion of GOOGLE's mobile market share.

24. In the advertising-supported Internet marketplace, Android users' personally-identifying information has value to both Android users (who value the privacy of such information, including the ability to control its dissemination) and the Android Developers (who value the multiple uses such information has). In the hands of developers, the improperly communicated private information of the Subclass members can be leveraged in several ways, for example, in targeting advertising for the developer's other products, or by participating in any of the multiple advertising networks operating on the Internet today.⁴¹ In this context, the

³⁹ Simple average of the ARPU from SEC filings as calculated by Digital Strategy Consulting, in: http://www.digitalstrategyconsulting.com/intelligence/2014/06/ad_revenue_per_user_google_facebook_twitter.php.

⁴⁰ Generally, I understand from my review of the Internet Technology media and various sources that Google, Inc., Amazon.com, Inc., and Apple, Inc. all participate in the same 30/70 split on revenue generated through their respective mobile application stores (Google Play, Amazon Marketplace, and the App Store, respectively). See: Google Developer Support (support.google.com/googleplay/android-developer/answer/112622?hl=en), Apple Developer Guidelines (developer.apple.com/app-store/review/guidelines/#purchasing-currencies), and Amazon Program Overview (<https://developer.amazon.com/appsandservices/support/faq>).

⁴¹ In the current marketplace, even the limited pieces of information at issue (name, email, location) can be significantly leveraged when used to design targeted advertising campaigns across services such as Facebook's Custom Audiences product, whereby advertisers can cross reference the email addresses thus obtained with

1 average Android developer⁴² is estimated to earn average revenue of \$1.25 per user (ARPU).⁴³
 2 Evidently, GOOGLE is in a better position to leverage user information than developers, but
 3 both parties can extract several orders of magnitude of incremental value by using the private
 4 information at issue, relative to the market cost of obtaining generic email data.

5 25. As a result of the unauthorized disclosure of Plaintiffs' information to Android
 6 Developers, the former also suffer a total loss of control over the private information they
 7 value. The disclosed information comes to developers from GOOGLE, but its disclosure is not
 8 part of the contract between the developers and Plaintiffs and the other Subclass members.
 9 Once the personally identifiable information is in the hands of these unrelated parties, the risk
 10 arises that:

- 11 a. The developers may make secondary use of the information, such as targeted
 12 marketing;
- 13 b. The developers may make the information available to other third parties for
 14 marketing or other uses;
- 15 c. The developers' servers housing the information may be subject to security
 16 breaches and, thus, the information may be released to nefarious parties.

17
 18 26. Thus, an additional element of value to consider in appraising the damages that result
 19 from the contract breach at issue is to estimate the incremental value of safeguarding against
 20 further misuse of the information. From an economic perspective, this type of risk implies an

21 Facebook's complete set of identifying characteristics (See Facebook.com advertisers website at
 22 facebook.com/business/products/advanced-ads).

23 ⁴² This measure could be considered overly inclusive in terms of the revenue generating activities available since
 24 the developers receiving the improperly disclosed personal information of the Subclass members are selling the
 25 application, rather than using an ad-supported model, or selling in-app purchases which often eliminate ads from
 26 applications. Nevertheless, as an average, it consolidates the information from the variety of application
 27 monetization business models. The average is appropriate in this economic analysis as the market value since it
 28 results from the balance of revenue generation alternatives (paid, freemium, ad-supported, etc.).

⁴³ This is the average for publicly available data between December 2009 and June 2014. As detailed in Exhibit A
 to this Report, the data is weighted by: (a) the market share of each Android OS version, [from data provided on
 Android OS ARPU reported by app monetization technology firm Tapjoy, Inc. in: "Android Fragmentation: How
 to pick the Right OS" in: Tapjoy Insights, Issue 4, October 2012]; (b) the number of Android OS handset
 subscribers in the USA (Survey Data from Comscore's MobiLens compiled by The Guardian); and (c) by weights
 reflecting the share of devices per Android OS version Android Developers website, data compiled from Google
 Play data by Google, Inc. (<http://developer.android.com/about/dashboards/index.html>).

1 additional cost to the user whose information has been disseminated; there is a probability of
 2 identity theft, aggregation with other sensitive information, and other acts which may impose
 3 additional expenditures by the legitimate owner of the information to find, mitigate, or
 4 counteract. The situation at hand is, in this respect, analogous to the consequences of an
 5 inadvertent data breach, such as the recent private data lost to hackers at retailers, banks or
 6 insurers; while not all users will be affected, which users will in fact be affected is not easily
 7 predictable. Consequently, measures are put in place for all users, such as putting a "security
 8 freeze" on a person's credit report: Fees range from \$2 to \$15 per bureau, depending on the
 9 state of residence.⁴⁴ Another option is a credit/identity monitoring service is engaged to detect
 10 and, hopefully stop, misuses of the information. Market rates for such identity monitoring
 services usually range between \$10 and \$30 per month, depending on the range of features.⁴⁵

11 27. From the perspective of the incremental risk to which the Subclass members are now
 12 exposed as a direct result of the disclosure of their private information to third parties, the
 13 monetary amount needed in the market today to mitigate the risk and compensate Android
 14 users in covering the risk with a monitoring policy would cost between \$6 per user
 15 (considering the lowest cost of a security freeze on three credit bureaus) , and \$10/month per
 16 user (considering the most basic identity monitoring service).⁴⁶

17 28. As far as the consumption of Subclass members' resources, in terms of connectivity
 18 cost and power consumption is concerned, I researched market rates for such connectivity in
 19 the US during the Class Period. On average, between 2009 and 2014 the basic cost per MB
 20 (Megabyte) of mobile data use has declined and averaged \$0.068.⁴⁷ I would apply this unit
 21 cost to the data used in the unauthorized transmission per occurrence when it becomes available
 22 for analysis.

23 ⁴⁴ Consumer Reports, February 2014, online edition (www.consumerreports.org/cro/news/2014/02/should-you-put-a-security-freeze-on-the-credit-file/index.htm).

24 ⁴⁵ Current information for Life Lock®, other services offer similarly priced plans with various options and
 25 features, such as Identity Guard®, Identity Force®, and credit bureaus such as Experian® and TransUnion®.

26 ⁴⁶ While a resourceful consumer can personally monitor his/her credit report using a staggered strategy with the
 free annual credit report available by law, the market value of the services considered serves as a proxy for the
 time and resources expended or foregone to implement this apparently zero-cost do-it-yourself mitigation.

27 ⁴⁷ Year by year, the average cost per MB was 19¢ in 2009, 10¢ in 2010, 6¢ in 2011, 3¢ in 2012, 2¢ in 2013, and in
 28 2014 it averaged 1¢. Currently, a typical 5GB (Gigabyte = 1,024 MB) plan costs \$40/month in the US. Overall,
 the average for the period is 6.8¢(USD). Sources: Portio Research, "Mobile Data Usage Trends 2011-2015" 2011,
 p 14, and Open Technology Institute, "The Cost of Connectivity 2014" (Oct. 2014), p 20.

1 **29. Conclusions of Value.** – Having reviewed the Third Amended Complaint, and other
2 documentation referenced in the report, and considering my experience in assessing damages,
3 valuing intangibles, and conducting economic research, I have come to the following
4 conclusions relevant to this case:

- 5 a. The damage imposed on the members of the Subclass as a result of the breach of
6 contract resulting from the unauthorized and unnecessary disclosure of
7 personally identifiable information to third parties is quantifiable in economic
8 terms.
- 9 b. The foregoing direct and indirect effects of the breach damaged the privacy
10 interests of Subclass members along a number of economically meaningful
11 dimensions.
- 12 i. The personally identifiable information disclosed by GOOGLE in the
13 breach is an economic good with a baseline market value estimated at
14 \$0.18 per set (name, email, and location).
- 15 ii. The Subclass members' interest in keeping the disclosed information
16 private and secure was damaged irretrievably and its valuation for
17 unauthorized access and dissemination to third parties can be estimated
18 in the range between \$19.31 and \$28.26 per member.
- 19 iii. GOOGLE and the third party Android Developers having access and use
20 of the Subclass members' private information benefit directly and
21 indirectly in the form of acquiring purchase signals that can be leveraged
22 for marketing/advertising purposes. The economic benefit to the
23 breaching party can be estimated as the average revenue per user, net of
24 the market value of the information, as no more than \$40.93 in the
25
26
27
28

GOOGLE's possession⁴⁸ and \$1.07 in the possession of third party Android Developers.⁴⁹

iv. The Subclass members' economic interests have also been damaged by the loss of control of their private information and its disclosure to third parties that have no further privacy obligation to them. The incremental costs imposed by the additional information risk is measurable as the cost of mitigation measures that are either purchased in the market by the affected users, or are opportunity costs the Subclass members must bear if personally monitoring the use of their private information. The costs of mitigating the additional risk imposed by the breach of contract are valued at no less than \$6.00 per user.

v. Finally, the economic damage to Subclass Members for the unauthorized use of their mobile connectivity for GOOGLE to cause the unauthorized transmission of private information is estimated at \$0.068 per Megabyte, on average for the Class Period.

30. I declare under the penalty of perjury and under the laws of the State of California that the forgoing is true and correct and based upon my personal knowledge and/or professional opinions, and that if called upon to testify, I could verify the accuracy of the same. Furthermore, compensation related to this report is not dependent, in any way, upon the conclusions reached during the performance of the analysis (See Appendix C for details). This document was executed in the city of San Diego, California on March 12, 2015.

By: _____

Fernando Torres, MSc
Chief Economist
IPmetrics LLC

⁴⁸ This is the aforementioned GOOGLE ARPU (\$41.11) minus the market value of records consisting of name, email address and residential zip code cited before (\$0.18).

⁴⁹ This is the aforementioned Android developer ARPU (\$1.25) minus the market value of records consisting of name, email address and residential zip code cited before (\$0.18).

EXHIBIT A**Annual Device Market Shares by Android Version and
Average Revenue per User**

Android Version	Inception	2009	2010	2011	2012	2013	2014	ARPU
Version 1.1	2/9/2009	0.3%	0.1%					\$ 0.20
1.5 Cupcake	4/27/2009	27.7%	38.0%	2.0%				\$ 0.43
1.6 Donut	9/15/2009	54.2%	31.6%	2.0%	1.0%			\$ 0.44
2.0 Éclair	10/26/2009	17.8%	30.3%	23.5%	25.0%	1.0%		\$ 0.70
2.2 Froyo	5/20/2010			68.0%	60.0%	3.0%	0.5%	\$ 1.12
2.3 Gingerbread	12/6/2010			4.0%	4.0%	35.0%	14.0%	\$ 1.20
3.0 Honeycomb (Tablet only)	2/22/2011			0.5%	2.0%	1.0%	0.5%	\$ 0.97
4.0 Ice Cream Sandwich	10/18/2011				8.0%	24.0%	12.0%	\$ 1.19
4.1 Jelly Bean	7/9/2012					36.0%	55.0%	\$ 1.63
4.4 Kit Kat	9/3/2013						18.0%	\$ 1.53
5.0 Lollipop	11/12/2014							

Weighted Average ARPU	(2012 Prices)	\$0.48	\$0.51	\$1.00	\$1.01	\$1.34	\$1.49
--------------------------	------------------	--------	--------	--------	--------	--------	--------

Number of Android OS Smartphones	(millions)	1.75	9.72	33.46	57.63	74.25	95.67
-------------------------------------	------------	------	------	-------	-------	-------	-------

Weighted average (2009-2014)	\$1.25
---------------------------------	--------

Note:

Data for 2009 is as of December 2009, for 2010 – 2014 is for June of each year.

Sources:

- ARPU by Android Version: "Android Fragmentation: How to pick the Right OS" in: Tapijoy Insights, Issue 4, October 2012.
- Android Version Composition compiled from Android data:
<http://developer.android.com/about/dashboards/index.html>
- Number of Android OS handset subscribers in the USA compiled by The Guardian newspaper from survey data generated by Comscore's MobiLens service (<https://www.comscore.com/Products/Audience-Analytics/MobiLens>).

CURRICULUM VITAE AND PUBLICATIONS



Fernando Torres is an intellectual property economist with nearly 30 years of work experience in economics, financial analysis, and business management in the U.S. and Mexico. He is a member and Chief Economist at IPmetrics LLC, an IP consulting firm specializing in the strategic analysis, valuation, and expert witness assessment of the full spectrum of intangible assets.

Since 2004, Mr. Torres has applied his economics, finance and business experience, as well as skills in quantitative techniques, to the analysis and valuation of intangible assets, including valuation for transactional and litigation purposes (bankruptcy and infringement cases). Prior to joining IPinetrics, Mr. Torres served as Senior Economist at CONSOR® Intellectual Asset Management.

During recent years, Mr. Torres has undertaken projects involving the valuation and/or the assessment of infringement damages regarding copyrights, trademarks, patents, trade secrets, rights of publicity, and other intellectual assets in such industries as commercial agriculture, auto parts, apparel and footwear, retail, pharmaceuticals, entertainment, telecommunications, and non-profit organizations, among others.

Mr. Torres regularly presents on topics related to intangible asset valuation in a variety of venues, many of which qualify for CLE credit. During the past few years, Mr. Torres has been an instructor for the course "Valuing Intangible Assets for Litigation," which is part of the requirements of the Certified Forensic Financial Analyst designation issued by the National Association of Certified Valuation Analysts (NACVA).

1 Mr. Torres has been active in the area of the copyright and rights of publicity infringement
2 issues, encompassing from the unlicensed use of celebrity images to a class action lawsuit
3 against the major social networking site.

4 Mr. Torres is also the editor and author of the online "Patent Value Guide" and his
5 perspectives on the value of patents and other intellectual property assets have been cited in the
6 media, including Managing Intellectual Property, The New York Times, Forbes.com, Business
7 News Network, Business Valuation Resources, and The Democrat & Chronicle.

8 Mr. Torres is a member of the National Association of Forensic Economics, and of the Western
9 Economics Association International, among others. His career has spanned from academia, to
10 branches of government, to private industry and consulting.

11 He first earned a B.A. in Economics from the Metropolitan University in Mexico City (1980),
12 and went on to earn a Graduate Diploma in Economics from the University of East Anglia (U.
13 K., 1981), and a Master of Science Degree specializing in Econometrics from the University of
14 London, England (1982).

15 Prior to specializing in IP, his career centered on financial analysis and management in the
16 private sector, having been both a brand development consultant and an entrepreneur in several
17 business ventures, mainly in computer services and the health care industry. During the 1980s,
18 Mr. Torres was Professor of Economics at the Metropolitan University in Mexico City,
19 teaching Economic Policy, Economic Growth, Microeconomics, and Quantitative Methods.
20 Mr. Torres was later a financial consultant (NASD Series 7, 63, 65) for half a dozen years with
21 AXA Advisors LLC.

22 PROFESSIONAL ASSOCIATIONS

- 23
- 24 ■ National Association of Forensic Economics
- 25 ■ Western Economics Association International
- 26 ■ American Economic Association
- 27 ■ Society for Computational Economics
- 28

PUBLICATIONS

- "The Impact of Reorganization on Trademark Values," in: IP Management and Valuation Reporter, March 2012, BVR, Portland, OR.
- "Fundamental Principles of Patent Value," in: IP Management and Valuation Reporter, January 2012, BVR, Portland, OR.
- Book Chapter: "Valuation, Monetization, and Disposition in Bankruptcy" in IP Operations and Implementation for the 21st Century Corporation, John Wiley and Sons, Inc. (November, 2011).
- Chapter 15: "Copyrights" in Wiley Guide to Fair Value Under IFRS, John Wiley and Sons, Inc. (May, 2010).
- "The Road to Asia," Feature Article (co-author) in: World Trademark Review, No. 23, February/March 2010, pp. 19-22.
- "Trademark Values in Corporate Restructuring" (July, 2007). Social Sciences Research Network: <http://ssrn.com/abstract=1014741>
- "Establishing Licensing Rates Through Options" (September, 2006) Social Sciences Research Network: <http://ssrn.com/abstract=1014743> and in: http://formulatorres.blogspot.com/2006_05_01_archive.html
- Book Chapter: "Ch. 9: Recent developments in Patent Valuation" in: Practicing Law Institute, Patent Law Institute 2007: the Impact of Recent Developments on Your Practice, PLI Course Handbook (March 19, 2007).
- "Establishing Licensing Rates through Options," in: ipFrontline, September 12, 2006 (<http://www.ipfrontline.com/depts/article.asp?id=12586&deptid=3>).

SPEECHES AND PRESENTATIONS

- "What's a Brand Worth?" MCLE presentation for the California Bar Association, Intellectual Property Section, Trademark Interest Group, March 2015
- "Intellectual Property Valuation Techniques," MCLE presentation for Pillsbury Winthrop Shaw Pittman, San Diego, CA, August 2014
- "10 Common Mistakes in IP Valuation/Damages", CLE presentation to Jeffer Mangels Butler & Mitchell LLP, Los Angeles, CA, July 2014
- "Intellectual Property Valuation Techniques," MCLE presentation, San Diego, CA, April 2013
- "Intellectual Property Valuation and Monetization," a seminar for the Special American Business Internship Training (SABIT) Intellectual Property Rights program, U.S. Department of Commerce. March, 2013.

- 1 ■ "Valuing IP in the Context of Bankruptcy," webinar for the Certified Patent Valuation
Analyst curriculum, Business Development Academy. October, 2011.
- 2 ■ "Recent Developments in Intellectual Property Economic Damages," Presentation at the
3 Annual Conference of the National Association of Forensic Economics. June, 2011.
- 4 ■ "Valuing the Intangible: Where to Start?" CLE presentation to Sheppard Mullin Richter &
5 Hampton, LLP. December, 2009.
- 6 ■ "Defending and Enforcing Your Technology." Panelist at: Foley's Emerging Technologies
7 Conference: Navigating a New World – San Diego, CA (Foley & Lardner LLP); September
2009.
- 8 ■ "Intellectual Property Valuation, Monetization and Disposition in Bankruptcy" – CLE
9 presentation at the Spring Trademark Program of the NY Intellectual Property Law
10 Association – New York, NY; June 2009.
- 11 ■ "Damages Valuation and Expert Witnesses" (co-presenter) – CLE presentations to:
 - 12 ■ Gibson, Dunn & Crutcher LLP – Irvine, CA (June, 2008)
 - 13 ■ Arent Fox, LLP – Washington, DC (April, 2008)
 - 14 ■ Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P. – Washington,
DC (April, 2008)
- 15 ■ "Valuing Intangible Assets for Litigation" (Instructor) – National Association of Certified
16 Valuation Analysts (NACVA) – Fort Lauderdale, FL; December 2007
- 17 ■ "Valuing Intangible Assets for Litigation" (Instructor) – National Association of Certified
18 Valuation Analysts (NACVA) – Philadelphia, PA; October 2007
- 19 ■ "Trademark Values in Corporate Restructuring" – Western Economics Association
International 82nd Annual Conference – Seattle, WA; July, 2007
- 20 ■ "Entrepreneurship and Innovation" (Session Chair) – Western Economics Association
21 International 82nd Annual Conference – Seattle, WA; July, 2007
- 22 ■ "Alternative Focuses for 'But For' Scenario Specification in Commercial Litigation"
23 (Discussant) – National Association of Forensic Economics, Western Conference – Seattle,
WA; June, 2007
- 24 ■ "Patent Values in the Evolving I.P. Market" – Practicing Law Institute – Hot Topic Briefing
25 Teleconference; May 2007 (CLE Presentation)
- 26 ■ "Key Issues in Intellectual Property Due Diligence" – Due Diligence Symposium 2007 –
27 ACG – Iselin, NJ; April 2007
- 28

- 1 ■ "Life Sciences IP Due Diligence" – American Conference Institute – San Francisco, CA;
2 January 2007
- 3 ■ "Developments in Patent Valuation" – Practicing Law Institute – San Francisco, CA;
4 January 2007 (CLE Presentation)
- 5 ■ "Collins & Aikman Europe and Other Cross-Border Asset Sales: A Tale of Two Venues" –
6 American Bankruptcy Institute, Winter Leadership Meeting – Phoenix, AZ; December
7 2006
- 8 ■ "Valuing Intangible Assets for Litigation" (Instructor) – National Association of Certified
9 Valuation Analysts (NACVA) – San Diego, CA; December 2006
- 10 ■ "Effective IP Litigation Support and Valuation" – LeBoeuf, Lamb, Greene & MacRae, LLP
11 – New York, NY; February 2006 (CLE Presentation)
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28

APPENDIX B

TESTIMONY RELATED EXPERIENCE

(Past Four Years)

FERNANDO TORRES, MSc

Dates	Parties	Case No.	Court	Status	Nature	Hired by	Role
June 2011	Hebrew University of Jerusalem v. General Motors LLC	10-CV-3790	United States District Court Central District of California	Closed	Rights of Publicity, False Endorsement	Arent Fox	Expert Damages Report, Deposition
June 2011 – Sept. 2011	Laserfiche v. SAP AG, et al.	10-CV-7843	United States District Court Central District of California	Settled	Trademark Infringement.	Law Offices of R. Weiss, Buchwalter Nemer, & Macek LLP	Expert Damages Report – Rebuttal, Deposition
February 2012	The Int'l. Aloe Science Council Inc. V. Fruit of the Earth, Inc.	11-CV-2255	United States District Court District of Maryland	Settled	Trademark Infringement.	Kane Kessler, P.C.	Expert Rebuttal Report on Damages, Depositions
March 2012	A. Fraley, et al v. Facebook, Inc.	11-CV-1726	United States District Court Northern District of California	Settled	Rights of Publicity Class Action	The Arns Law Firm	Expert Declarations in Support of Motion for Class Certification, Value of Injunctive Relief, Deposition
September - November 2013	Scidera, Inc. v. Newsham Choice Genetics, LLC	AAA 16-174-00582-12	American Arbitration Association	Closed	Contract, Database	Neymaster Goode, PC	Expert Damages Rebuttal Report, Deposition, Arbitration
February 2014	Lambert Corp. v. LBJC, Inc. et al.	13-CV-0778	United States District Court Central District of California	Settled	Copyright & Trademark Infringement	Ezra Brutzkus Gubner LLP	Expert Damages Report, Deposition
April 2014	S. Mattocks v. Black Entertainment Television LLC	13-CV-61582	United States District Court Southern District of Florida	Closed	Intangible Asset Fair Market Value	Tripp Scott PA	Declaration, Expert Damages Report, Deposition

Dates	Parties	Case No.	Court	Status	Nature	Hired by	Role
July – Aug. 2014	Tierra Intellectual Borinquen, Inc. v. Toshiba America Information Systems, Inc., and Toshiba Corporation.	13-cv-47	United States District Court Eastern District of Texas	<i>Settled</i>	Patent Infringement	Ferraiuoli, LLC	Expert Damages Report, Deposition
Aug. 2014	S. Abu-Lughod v. S. Calis, Tocall, Inc., ASCII Media, Inc., et al.	13-cv-2792	United States District Court Central District of California	<i>Pending</i>	Contract, Software IP value	Kalbian Hagerty LLP	Expert Rebuttal Report, Deposition

COMPENSATION TERMS

IPmetrics' compensation is not dependent, in any way, upon the conclusions reached during the performance of the analysis.

DOCUMENT SOUGHT TO BE SEALED

**EXHIBIT M
REDACTED
IN FULL**

EXHIBIT N

GRANT & EISENHOFER P.A.
FIRM BIOGRAPHY

Grant & Eisenhofer P.A. (“G&E”) is a national litigation boutique with over 65 attorneys that concentrates on federal securities and corporate governance litigation and other complex class litigation. G&E primarily represents domestic and foreign institutional investors, both public and private, who have been damaged by corporate fraud, greed and mismanagement. The Firm was named to *The National Law Journal*’s “Plaintiffs’ Hot List” for the last ten years and is listed as one of America’s Leading Business Law Firms by Chambers & Partners, who reported that G&E “commanded respect for its representation of institutional investors in shareholder and derivative actions, and in federal securities fraud litigation.” Based in Delaware, New York, Chicago, and Washington, D.C., G&E routinely represents clients in federal and state courts throughout the country. G&E’s clients include the California Public Employees’ Retirement System, New York State Common Retirement Fund, Ohio Public Employees’ Retirement System, State of Wisconsin Investment Board, Teachers’ Retirement System of Louisiana, PIMCO, Trust Company of the West, The Capital Guardian Group and many other public and private domestic and foreign institutions.

G&E was founded in 1997 by Jay W. Eisenhofer and Stuart M. Grant, former litigators in the Wilmington office of the nationally prominent firm of Skadden, Arps, Slate, Meagher & Flom LLP. Over the years, the Firm’s directors have gained national reputations in securities and corporate litigation. In fact, G&E was the first law firm in the country to argue the provisions of the Private Securities Litigation Reform Act (“PSLRA”) allowing an institutional investor to be appointed as lead plaintiff in a securities class action. The Firm has gone on to build a national and international reputation as a leader in securities litigation. In both class action and “opt-out” cases, G&E has attracted widespread recognition for protecting investors’ rights and recovering their damages. The Firm has recovered over \$28 billion for its clients in the last ten years, and RiskMetrics Group has twice recognized G&E for winning the highest average investor recovery in securities class actions.

G&E has served as lead counsel in many of the largest securities class action recoveries in U.S. history, including:

- \$3.2 billion settlement from Tyco International Ltd. and related defendants
- \$922 million from UnitedHealth Group
- \$450 million Pan-European settlement from Royal Dutch Shell
- \$448 million settlement in Global Crossing Ltd. securities litigation
- \$422 million total class recovery for investors in the stock and bonds of Refco
- \$400 million recovery from Marsh & McLennan
- \$325 million from Delphi Corp.
- \$303 million settlement from General Motors
- \$300 million settlement from DaimlerChrysler Corporation
- \$300 million recovery from Oxford Health Plans
- \$276 million judgment & settlement for Safety-Kleen bond investors

G&E has also achieved landmark results in corporate governance litigation, including:

In re UnitedHealth Group Inc. Shareholder Derivative Litigation: G&E represented the Ohio Public Employees Retirement System, State Teachers Retirement System of Ohio, and Connecticut Retirement Plans and Trust Funds as lead plaintiffs in a derivative and class action suit in which G&E successfully challenged \$1.2 billion in back-dated options granted to William McGuire, then-CEO of health care provider UnitedHealth Group (“UHG”). This was among the first – and most egregious – examples of options backdating. As previously stated, G&E’s case against UHG produced a settlement of \$922 million, the largest settlement in the history of derivative litigation in any jurisdiction.

In re Digex, Inc. Shareholders Litigation – G&E initiated litigation alleging that the directors and majority stockholder of Digex, Inc. breached fiduciary duties to the company and its public shareholders by permitting the majority shareholder to usurp a corporate opportunity that belonged to Digex. G&E’s efforts in this litigation resulted in an unprecedented settlement of \$420 million, the largest settlement in the history of the Delaware Chancery Court.

Caremark / CVS Merger - G&E represented two institutional shareholders in this derivative litigation challenging the conduct of the board of directors of Caremark Rx Inc. in connection with the negotiation and execution of a merger agreement with CVS, Inc., as well as the board’s decision to reject a competing proposal from a different suitor. Through the litigation, Caremark’s board was forced to renegotiate the terms of the merger agreement with CVS. The settlement ensured statutory rights of Caremark shareholders, providing an additional \$3.19 billion in cash consideration.

Teachers’ Retirement System of Louisiana v. Greenberg, et al. and American International Group, Inc.: In what was, at the time, the largest settlement of shareholder derivative litigation in the history of the Delaware Chancery Court, G&E reached a \$115 million settlement in a lawsuit against former executives of AIG for breach of fiduciary duty. The case challenged hundreds of millions of dollars in commissions paid by AIG to C.V. Starr & Co., a privately held affiliate controlled by former AIG Chairman Maurice “Hank” Greenberg and other AIG directors. The suit alleged that AIG could have done the work for which it paid Starr, and that the commissions were simply a mechanism for Greenberg and other Starr directors to line their pockets.

AFSCME v. AIG – This historic federal appeals court ruling in favor of G&E’s client established the right, under the then-existing proxy rules, for shareholders to place the names of director candidates nominated by shareholders on corporate proxy materials – reversing over 20 years of adverse rulings from the SEC’s Division of Corporate Finance and

achieving what had long been considered the “holy grail” for investor activists. Although the SEC took nearly immediate action to reverse the decision, the ruling renewed and intensified the dialogue regarding proxy access before the SEC, ultimately resulting in a new rule currently being considered by the SEC that, if implemented, will make proxy access mandatory for every publicly traded corporation.

Unisuper Ltd. v. News Corp., et al. – G&E forced News Corp. to rescind the extension of its poison pill on the grounds that it was obtained without proper shareholder approval.

Teachers’ Retirement System of Louisiana v. HealthSouth – G&E negotiated a settlement which ousted holdover board members loyal to indicted CEO Richard Scrushy and created mechanisms whereby shareholders would nominate their replacements.

Carmody v. Toll Brothers – This action initiated by G&E resulted in the seminal ruling that “dead-hand” poison pills are illegal.

In re Refco Inc. Securities Litigation – G&E represented Pacific Investment Management Company LLC (“PIMCO”) as co-lead plaintiff in a securities class action alleging that certain officers and directors of Refco Inc., as well as other defendants including the company’s auditor, its private equity sponsor, and the underwriters of Refco’s securities, violated the federal securities laws in connection with investors’ purchases of Refco stock and bonds. Recoveries for the class exceeded \$400 million, including \$140 million from the company’s private equity sponsor, over \$50 million from the underwriters, and \$25 million from the auditor.

In addition, the Firm’s lawyers are often called upon to testify on behalf of institutional investors before the SEC and various judicial commissions, and they frequently write and speak on securities and corporate governance issues. G&E managing director Jay Eisenhofer and director Michael Barry are co-authors of the *Shareholder Activism Handbook*, and in 2008, Jay Eisenhofer was named one of the 100 most influential people in the field of corporate governance.

G&E is proud of its success in fighting for institutional investors in courts and other forums across the country and throughout the world.

G&E's Attorneys

Jay W. Eisenhofer

Jay Eisenhofer, co-founder and managing director of Grant & Eisenhofer P.A., has been counsel in more multi-hundred million dollar cases than any other securities litigator, including the \$3.2 billion settlement in the Tyco case, the \$922 million UnitedHealth Group settlement, the \$450 million settlement in the Global Crossing case, the historic \$450 million pan-European settlement in the Shell case, as well as a \$400 million settlement with Marsh & McLennan, a \$303 million settlement with General Motors and a \$300 million settlement with DaimlerChrysler. Mr. Eisenhofer was also the lead attorney in the seminal cases of *American Federation of State, County & Municipal Employees, Employees Pension Plan v. American International Group, Inc.*, where the U.S. Court of Appeals required shareholder proxy access reversing years of SEC no-action letters, and *Carmody v. Toll Brothers*, wherein the Delaware Court of Chancery first ruled that so-called “dead-hand” poison pills violated Delaware law.

Mr. Eisenhofer has served as litigation counsel to many public and private institutional investors, including, among others, Amalgamated Bank, APG Asset Management, California Public Employees Retirement System, California State Teachers Retirement System, Colorado Public Employees Retirement Association, the Florida State Board of Administration, John Hancock, Louisiana State Employees Retirement System, New York City Retirement Funds, Inc., and Service Employees International Union.

Mr. Eisenhofer is consistently ranked as a leading securities and corporate governance litigator and he has been named by Lawdragon to its annual list of the top 500 lawyers in America each year since 2006. He is also recognized by Benchmark Litigation as one of the Top 100 Trial Lawyers. *The National Law Journal* has selected Grant & Eisenhofer as one of the top plaintiffs' law firms in the country for the last eleven years in the annual “Plaintiffs' Hot List,” earning the firm a place in *The National Law Journal*'s “Plaintiffs' Hot List Hall Of Fame” in 2008, as well as to its 2014 inaugural list of “Elite Trial Lawyers: The 50 Leading Plaintiffs Firms in America.” The firm has twice been selected as a “Most Feared Plaintiffs Firm” by *Law360* and “one of the most high-profile shareholder and whistleblower advocates in the country, securing record-high cash settlements.” *U.S. News & World Report* has also repeatedly named Grant & Eisenhofer to its list of “Best Law Firms” in the fields of Securities Litigation, Commercial Litigation, and Corporate Law. Mr. Eisenhofer is rated AV by Martindale-Hubbell.

Mr. Eisenhofer has written and lectured widely on securities fraud and insurance coverage litigation, business and employment torts, directors' and officers' liability coverage, and the Delaware law of shareholder rights and directorial responsibilities. Among the publications he has authored: “The Shareholders Activism Handbook” Aspen Publishers; “Proxy Access Takes Center Stage – The Second Circuit’s Decision in *AFSCME Employees Pension Plan v. American International Group, Inc.*” *Bloomberg Law Reports*, Vol. 1, No. 5; “Investor Litigation in the U.S. - The System is Working” *Securities Reform Act Litigation Reporter*, Vol. 22, #5; “*In re Walt Disney Co. Deriv. Litig.* and the Duty of Good Faith Under Delaware Corporate Law” *Bank & Corporate Governance Law Reporter*, Vol. 37, #1; “Institutional Investors As Trend-Setters In Post-PSLRA Securities Litigation” *Practising Law Institute*, July, 2006; “*In re Cox Communications, Inc.*: A Suggested Step in the Wrong Direction,” *Bank and Corporate Governance Law Reporter*, Vol. 35, #1; “Does Corporate Governance Matter to Investment

Returns?” *Corporate Accountability Report*, Vol. 3, No. 37; “Loss Causation in Light of Dura: Who is Getting it Wrong?” *Securities Reform Act Litigation Reporter*, Vol. 20, #1; “Giving Substance to the Right to Vote: An Initiative to Amend Delaware Law to Require a Majority Vote in Director Elections,” *Corporate Governance Advisor*, Vol. 13, #1; “An Invaluable Tool in Corporate Reform: Pension Fund Leadership Improves Securities Litigation Process,” *Pensions & Investments*, Nov. 29, 2004; and “Securities Fraud, Stock Price Valuation, and Loss Causation: Toward a Corporate Finance-Based Theory of Loss Causation,” *Business Lawyer*, Aug. 2004. Mr. Eisenhofer has also authored a number of articles on illiquid and rouge hedge funds, including “Time for Hedge Funds to Become Accountable to Fiduciary Investors,” *Pensions & Investments*, April 30, 2012; and “Hedge Funds of the Living Dead,” *New York Times Dealbook*, June 4, 2012.

Mr. Eisenhofer serves as a member of the NYU Law School Advisory Board for the Center on Civil Justice, and as co-chair for the Securities Litigation Committee of the American Association for Justice. Mr. Eisenhofer currently serves as a member of the New York City Mayor’s Advisory Board for the Mayor’s Fund to Advance New York City, and also serves as an ex-officio Trustee on the Board of Trustees of the American Museum of Natural History. He is a graduate of the University of Pittsburgh, and a 1986 *magna cum laude* graduate of Villanova University School of Law, Order of the Coif. He was a law clerk to the Honorable Vincent A. Cirillo, President Judge of the Pennsylvania Superior Court and thereafter joined the Wilmington office of Skadden Arps Slate Meagher & Flom. Mr. Eisenhofer was a partner in the Wilmington office of Blank Rome Comisky & McCauley until forming Grant & Eisenhofer P.A. in 1997.

Stuart M. Grant

Stuart M. Grant, co-founder and managing director of Grant & Eisenhofer P.A., is internationally recognized for his extensive knowledge in the areas of Delaware corporate law, fiduciary responsibility, securities and investments, private equity and fixed income, appraisal remedies, valuation, proxy contests and other matters related to protecting and promoting the rights of institutional investors. He serves as litigation counsel to many of the largest public and private institutional investors in the world.

Mr. Grant was the first attorney to argue the provisions of the PSLRA allowing an institutional investor to be appointed as sole lead plaintiff and has served as lead counsel in seven of the ten largest settlements in the history of Delaware Chancery Court.

Among his many accolades, Mr. Grant is consistently ranked in Band 1 of *Chambers USA* as a leading litigator for his work in Delaware Chancery and securities, regulatory and corporate governance litigation. For the past several years, he has been named to Best Lawyers, ranked as a leading lawyer by Legal 500, and selected for inclusion in *Super Lawyers*. Mr. Grant, who has also been recognized as one of the Top 500 Leading Lawyers in America by Lawdragon, is rated AV by Martindale-Hubbell, and is recognized by Benchmark Litigation as one of the Top 100 Trial Lawyers. Additionally, *The National Law Journal* has selected Grant & Eisenhofer to its 2014 inaugural list of “Elite Trial Lawyers: The 50 Leading Plaintiffs Firms in America.”

Mr. Grant has successfully argued on behalf of institutional investors in many groundbreaking corporate governance cases including:

In re Del Monte Foods Company Shareholders Litigation, which resulted in an unprecedented and immediate change in lending policy practices among major investment banks regarding the way the banks approach financing transactions in which they represent the seller;

In re Digex Stockholders Litigation, the largest settlement in Delaware Chancery Court history, which led to the establishment of lead plaintiff provisions in Delaware;

Teachers' Retirement System of Louisiana v. Aidinoff, et al. and American International Group, Inc., one of the largest derivative shareholder litigation settlements in the history of Delaware Chancery Court; *UniSuper Ltd., et al. v. News Corporation, et al.*, a landmark case in which the Delaware Chancery Court ruled that shareholders may limit board authority without amending the corporation's charter;

In re Tyson Foods, Inc., which resulted in historic rulings from the Delaware Court of Chancery clarifying the fiduciary duties of corporate directors in connection with the administration of stock option plans;

Teachers' Retirement Systems of Louisiana v. Richard M. Scrushy, et. al., which ousted holdover board members loyal to indicted CEO Richard Scrushy and created mechanisms whereby shareholders would nominate their replacements;

In re Cablevision Systems Corp. Options Backdating Litigation and *In re Electronics for Imaging, Inc. Shareholder Litigation*, both of which held directors and officers of their respective companies accountable for improperly granting backdated options and, most importantly, required the individual defendants to reach into their own pockets to cover a significant portion of the settlement.

Included among Mr. Grant's more notable securities class action representations are: *Gluck, et al. v. Cellstar*, the first allowing an institutional investor to be appointed as lead plaintiff in a securities class action under the Private Securities Litigation Reform Act (PSLRA) and widely considered the landmark on the standards applicable to lead plaintiff/lead counsel practice under the PSLRA; *In re Refco Inc. Securities Litigation*, which resulted in a recovery exceeding \$400 million; *In re Safety-Kleen Securities Corporation Bondholders Litigation*, which, after a six-week securities class action jury trial, resulted in judgments holding the company's CEO and CFO jointly and severally liable for nearly \$200 million and settlements with the remaining defendants for \$84 million; and *In re Parmalat Securities Litigation*, which resulted in a settlement of approximately \$100 million in what the SEC described as "one of the largest and most brazen financial frauds in history."

Mr. Grant serves as Vice-Chairperson of the Delaware Judicial Nominating Commission, as a member of the Board of Trustees for the University of Delaware, and on the Advisory Board for the Weinberg Center for Corporate Governance at the University of Delaware. Mr. Grant was an Adjunct Professor of Law at the Widener University School of Law from 1994-2009, where he taught securities litigation, and is a past trustee of the Delaware Art Museum.

Mr. Grant has authored a number of articles which have been cited with approval by the U.S. Supreme Court, U.S. Court of Appeals for the 2nd and 5th Circuits and numerous U.S. District Courts. His articles include, among others, "The Devil is in the Details: Application of the PSLRA's Proportionate Liability Provisions is so Fraught With Uncertainty That They May be Void for Vagueness"; "Class Certification and Section 18 of the Exchange Act"; "*Unisuper v. News Corporation*: Affirmation that Shareholders, Not Directors, Are the Ultimate Holders of

Corporate Power”; “Executive Compensation: Bridging the Gap Between What Companies Are Required to Disclose and What Stockholders Really Need to Know”; and a number of annual PLI updates under the heading of “Appointment of Lead Plaintiff Under the Private Securities Litigation Reform Act.”

Mr. Grant was graduated in 1982 *cum laude* from Brandeis University with a B.A. in economics and received his J.D. from New York University School of Law in 1986. He served as Law Clerk to the Honorable Naomi Reice Buchwald in the U.S. District Court for the Southern District of New York. Mr. Grant was an associate at Skadden, Arps, Slate, Meagher & Flom (1987-94), and a partner in the Wilmington office of Blank Rome Comisky & McCauley from 1994 until forming Grant & Eisenhofer P.A. in 1997.

Jeff A. Almeida

Jeff Almeida is a director at Grant & Eisenhofer practicing in the areas of corporate, securities and complex commercial litigation. Mr. Almeida has represented domestic and foreign institutional investors in prominent securities fraud actions including, *In re Qwest Communications International Securities Litigation*; *In re Alstom SA Securities Litigation*; *In re Refco Inc. Securities Litigation*; *In re Merck & Co., Inc. Vytarin/Zetia Securities Litigation*; *In re Pfizer Inc. Securities Litigation*; and *In re Global Cash Access Holdings Securities Litigation*. Mr. Almeida has also been actively engaged in derivative and class litigation in the Delaware Court of Chancery, including the matters *In re Tyson Foods, Inc.*, which resulted in historic rulings clarifying the fiduciary duties of corporate directors in connection with the administration of stock option plans; *Louisiana Police Employees Retirement System v. Crawford* (“Caremark”), a well-publicized derivative action challenging the terms of the Caremark and CVS merger that resulted in a \$3.2 billion settlement; and *In re Genentech Inc. Shareholder Litigation*, where he successfully represented Genentech minority stockholders against Roche’s heavy-handed attempt to squeeze out the minority to seize control of Genentech. In recent years, Mr. Almeida has also represented prominent hedge fund clients in complex commercial litigation involving claims of short-squeeze market manipulation and the marketing and sale of abusive tax shelters.

Prior to joining Grant & Eisenhofer in August 2004, Mr. Almeida was affiliated for seven years as an attorney with a major Philadelphia defense firm, where he practiced in the areas of complex commercial litigation, with a focus on consumer class actions, commercial contract disputes, and insurance coverage and bad faith defense.

Mr. Almeida is a 1994 graduate of Trinity College in Hartford, Connecticut, where he captained the varsity basketball team and achieved election to Phi Beta Kappa, and a 1997 graduate of William and Mary Law School in Williamsburg, Virginia. Mr. Almeida is admitted to practice in Delaware, Pennsylvania, and New Jersey, along with several federal district courts.

Michael J. Barry

Michael Barry is a director at Grant & Eisenhofer focusing on corporate governance and securities litigation. For over thirteen years, he has represented institutional investors in litigation relating to securities fraud, corporate fiduciary responsibilities, shareholder proposals under SEC Rule 14a-8, and corporate governance generally. As a foremost practitioner in these areas, Mr.

Barry has been significantly involved in groundbreaking class action recoveries, corporate governance reforms and shareholders rights litigation.

He has been instrumental in landmark corporate governance cases, including *AFSCME v. AIG*, which recognized shareholders' right to introduce proxy access proposals; *Bebchuk v. CA, Inc.*, which allowed shareholders to introduce proposals restricting a board's ability to enact poison pills; and *CA, Inc. v. AFSCME*, a historic decision of the Delaware Supreme Court regarding the authority of shareholders to adopt corporate bylaws. His casework includes the Genentech Shareholder Litigation, resulting in an increase of \$3 billion in value for shareholders arising from a corporate merger; a \$922 million settlement in the UnitedHealth Group derivative litigation, resolving one of the most egregious examples of options backdating; and an \$89.4 million recovery for stockholders of Del Monte Foods Co. in a case that exposed significant conflicts of interest in staple financing in corporate mergers.

Mr. Barry has spoken widely on corporate governance and related matters. In addition to serving as a frequent guest lecturer at Harvard Law School, he speaks at numerous conferences each year. Mr. Barry has authored several published writings, including the *Shareholder Activism Handbook*, a comprehensive guide for shareholders regarding their legal rights as owners of corporations, which he co-authored. In 2015, Mr. Barry was selected to the Markets Advisory Council for the Council of Institutional Investors.

Prior to joining Grant & Eisenhofer, Mr. Barry practiced at a large Philadelphia-based firm, where he defended the Supreme Court of Pennsylvania, the Pennsylvania Senate and Pennsylvania state court judges in a variety of trial and appellate matters. He is a 1990 graduate of Carnegie Mellon University and graduated *summa cum laude* in 1993 from the University of Pittsburgh School of Law, where he was an Executive Editor of the *University of Pittsburgh Law Review* and a member of the Order of the Coif.

Daniel L. Berger

Daniel Berger is a director at Grant & Eisenhofer. Prior to joining the firm, Mr. Berger was a partner at two major plaintiffs' class action firms in New York, including Bernstein Litowitz Berger & Grossmann (BLBG), where he had litigated complex securities and discrimination class actions for twenty two years.

Mr. Berger's experience includes trying three 10b-5 securities class actions to jury verdicts, which are among very few such cases ever tried. He also served as principal lead counsel in many of the largest securities litigation cases in history, achieving successful recoveries for classes of investors in cases including *In re Merck Vytarin/Zetia Securities Litigation* (\$215 million); *In re Cendant Corp. Securities Litigation* (\$3.3 billion); *In re Lucent Technologies, Inc. Securities Litigation* (\$675 million); *In re Bristol-Myers Squibb Securities Litigation* (\$300 million); *In re Daimler Chrysler A.G. Securities Litigation* (\$300 million); *In re Conseco, Inc. Securities Litigation* (\$120 million); *In re Symbol Technologies Securities Litigation* (\$139 million); and *In re OM Group Securities Litigation* (\$92 million).

Mr. Berger has successfully argued several appeals that made new law favorable to investors, including *In re Suprema Specialties, Inc. Securities Litigation*, 438 F.3d 256 (3d Cir. 2005); *McCall v. Scott*, 250 F.3d 997 (6th Cir. 2001) and *Fine v. American Solar King Corp.*, 919 F.2d

290 (5th Cir. 1990.) In addition, Mr. Berger was lead class counsel in many important discrimination class actions, in particular *Roberts v. Texaco, Inc.*, where he represented African-American employees of Texaco and achieved the then largest settlement (\$175 million) of a race discrimination class action.

Mr. Berger currently serves on the Board of Visitors of Columbia University Law School. Previously, Mr. Berger was a member of the Board of Managers of Haverford College from 2000-2003. He also now serves as the Co-Chair of the Board of GO Project, a not-for profit organization that provides academic support for New York City public school students, and also serves as a Member of the Board of Grace Church School in New York. He also served on the Board of in Motion, Inc., a non-profit organization providing legal services to victims of domestic violence, for six years.

Mr. Berger is a 1976 graduate from Haverford College, and graduated in 1979 from Columbia University School of Law.

Cynthia A. Calder

Cynthia Calder is a director at Grant & Eisenhofer. She concentrates her practice in the areas of corporate governance and securities litigation. She has represented shareholders in such seminal cases in the Delaware Court of Chancery as *UniSuper Ltd. v. News Corp.*, vindicating the shareholders' right to vote; *Carmody v. Toll Brothers*, finding the dead-hand poison pill defensive measure was illegal under Delaware law, *Jackson National Life Insurance Co. v. Kennedy*, breaking new ground in the interpretation of fiduciary duties owed to preferred shareholders; *Haft v. Dart Group Corp.*, resolving a contest for control of a significant public corporation; and *Paramount Communications Inc. v. QVC Network*, obtaining an injunction preventing the closing of a merger to force the board of directors to appropriately consider a competing bid for the corporation. More recently, Ms. Calder prosecuted a derivative suit on behalf of American International Group, Inc. shareholders against the company's former CEO, Maurice Greenberg, and other former AIG executives. The action was concluded for a settlement of \$115 million – the largest such settlement in the history of the Delaware Court of Chancery. Ms. Calder was also the Court-appointed representative on the shareholder counsel's committee in the UnitedHealth Group derivative litigation, which was settled for more than \$900 million – the largest known derivative settlement in any court system. Ms. Calder also recently prosecuted a shareholder class action, *In re ACS Shareholder Litigation*, which resulted in one of the largest class recoveries in the history of the Court of Chancery.

Ms. Calder has co-authored numerous articles on corporate governance and securities litigation, including "Options Backdating from the Shareholders' Perspective" *Wall Street Lawyer*, Vol. 11, No. 3; "Securities Litigation Against Third Parties: Pre-Central Bank Aiders and Abettors Become Targeted Primary Defendants" *Securities Reform Act Litigation Reporter*, Vol. 16, No. 2; and "Pleading Scienter After Enron: Has the World Really Changed?" *Securities Regulation & Law*, Vol. 35, No. 45.

Ms. Calder graduated *cum laude* from the University of Delaware in 1987 and graduated from the Villanova University School of Law in 1991. Upon graduating from law school, Ms. Calder served as a Judicial Law Clerk in the Delaware Court of Chancery to the Honorable Maurice A.

Hartnett, III. Prior to joining Grant & Eisenhofer, Ms. Calder was an associate at Blank, Rome, Comisky & McCauley.

Charles T. Caliendo

Charles Caliendo is a director at Grant & Eisenhofer. He represents institutional investors in class action securities, opt-out and shareholder derivative litigation. Prior to joining Grant & Eisenhofer, he served as an Assistant Attorney General in the Investment Protection Bureau of the New York State Attorney General's Office where he prosecuted cases and led investigations related to mutual fund market timing and late trading. Mr. Caliendo practiced at a Manhattan-based law firm in the areas of class action securities, mergers and acquisitions, corporate governance and other commercial litigation.

Mr. Caliendo has written and spoken on issues relating to regulatory enforcement, corporate internal investigations and securities and shareholder litigation. In November 2004 and June 2006, Mr. Caliendo was a speaker at financial services industry seminars sponsored by The Association of the Bar of the City of New York for which he authored articles entitled "The Investment Protection Bureau: An Overview of Financial Markets Regulation and Enforcement in New York" and "Thompson Memo Under A Microscope." In June 2005, Mr. Caliendo spoke before a delegation of Chinese mutual fund CEOs participating in the Penn-China Mutual Fund CEO Leadership Program, University of Pennsylvania Graduate School of Education. Mr. Caliendo co-authored "Who Says The Business Judgment Rule Does Not Apply To Directors Of New York Banks?" 118 *Banking Law Journal* 493 (June 2001) and "Board of Directors' 'Revlon Duties' Come Into Focus," *New York Law Journal*, vol. 222, no. 86, col. 1 (Nov. 1, 1999).

Mr. Caliendo received his B.S. from Cornell University and J.D. from St. John's University School of Law where he was an editor of the *St. John's Law Review* and a Saint Thomas More Scholar.

Nathan A. Cook

Nathan Cook is a director at Grant & Eisenhofer, focusing on corporate governance, class action and derivative litigation.

Previously, Mr. Cook worked as an associate at the law firm of Abrams & Bayliss LLP (formerly Abrams & Laster LLP) in Wilmington, Delaware. He has obtained substantial experience litigating before the Delaware Court of Chancery and the Delaware Supreme Court and providing corporate advisory services on a variety of matters relating to Delaware law. Mr. Cook also participated in a successful, highly-expedited arbitration involving complex transactional issues.

Mr. Cook co-authored *The Delaware Supreme Court Weighs in on Fiduciary Duties to Creditors*, Insights (June 2007).

Mr. Cook is a member of the Richard S. Rodney Inn of Court, the American Bar Association (Business Law Section), the Delaware State Bar Association, and the New York State Bar Association.

Mr. Cook received his J.D. from the University of Virginia in 2005, where he served on the Editorial Board for the Virginia Environmental Law Journal. Following graduation from law school, Mr. Cook served as a law clerk to the Honorable John W. Noble of the Delaware Court of Chancery. Mr. Cook received a B.A., with distinction, from the University of Virginia in 2002, where he majored in economics and history and was a Jefferson Scholar and an Echols Scholar.

Robert G. Eisler

Robert Eisler is a director in Grant & Eisenhofer's antitrust practice. Mr. Eisler has been involved in many significant antitrust class action cases in recent years. He is experienced in numerous industries, including pharmaceuticals, paper products, construction materials, industrial chemicals, processed foods, municipal securities, and consumer goods.

Mr. Eisler has served as lead or co-lead counsel in many of the largest antitrust cases litigated, including, *In re Buspirone Antitrust Litigation*, (which led to a \$90 million settlement and in which presiding Judge Koeltl stated that the plaintiffs' attorneys had done "a stupendous job"), *In re Ciprofloxacin Hydrochloride Antitrust Litigation*, *In re Flat Glass Antitrust Litigation*, *In re Municipal Derivatives Antitrust Litigation*, and *In re Chocolate Confectionary Antitrust Litigation*.

Mr. Eisler has played major roles in a number of other significant antitrust cases, including *In re Linerboard Antitrust Litigation*, *In re Aftermarket Filters Antitrust Litigation*, and *In re Publication Paper Antitrust Litigation*.

Mr. Eisler also has extensive experience in securities, derivative, complex commercial and class action litigation at the trial and appellate levels. He has been involved in numerous securities and derivative litigation matters on behalf of public pension funds, municipalities, mutual fund companies and individual investors in state and federal courts.

In addition, Mr. Eisler has significant experience litigating antitrust matters in the U.K., including cases concerning cartels in a number of industries, such as: air cargo services, air passenger services, automotive glass, and pharmaceuticals, among others. With respect to foreign discovery in London in particular, he has taken numerous depositions of European defendants and witnesses in London in many antitrust cases, as well as in other types of matters.

Mr. Eisler graduated from LaSalle University in 1986, and in 1989 from Villanova University School of Law.

Elizabeth (Beth) Graham

Elizabeth ("Beth") Graham is a director at Grant & Eisenhofer, leading the firm's complex pharmaceutical and device litigation practice. Since 1989, she has dedicated her practice to complex mass tort and class action litigation.

Ms. Graham's expertise spans the practice areas of mass tort, consumer fraud, product liability, environmental, and employment. She has served as Lead Class Counsel in multi-million dollar

cases, has acted as a member of various Plaintiffs' Executive Committees in complex actions, and has prior experience as national defense coordination counsel in product liability litigation.

Notably, Ms. Graham has served as lead counsel in high profile class actions such as *Borman Automotive v. American Honda Motor Corp.* (MDL No. 1069), which resulted in a \$435 million settlement; and litigation against Chrysler based on its Minivan Doorlatch failures and ABS brake defects. Ms. Graham served on the Plaintiffs' Steering Committee and represented dozens of victims in the *In re Sulzer Hip Prosthesis and Knee Prosthesis Liability Litigation* (MDL No. 1410). She has also represented over one hundred families injured by environmental contaminants, including radon, arsenic and rocket fuel, resulting in confidential settlements in excess of \$25 million. Ms. Graham also has vast experience as a consultant to other mass tort firms that seek her advice in structuring their cases.

Currently, Ms. Graham serves on the Plaintiffs' Steering Committee in the Stryker Hip litigation, and is Co-Chair of the Law & Briefing Committee for *In re Xarelto Products Liability Litigation*. She is also actively representing injured victims in cases against major pharmaceutical companies and medical device manufacturers.

Prior to her representation of injured individuals and victims of consumer fraud, Ms. Graham worked for large product liability defense firms as national defense counsel in cases such as *In re Silicone Breast Implant Litigation*.

Before joining G&E, Ms. Graham was a partner at several San Francisco area law firms, as well as the President and Co-Founder of RG2 Claims Administration, LLC and a partner at Heffler Claims Group.

Geoffrey C. Jarvis

Geoffrey Jarvis, a director at Grant & Eisenhofer, focuses on securities litigation for institutional investors. He had a major role in Oxford Health Plans Securities Litigation and DaimlerChrysler Securities Litigation, both of which were among the top ten securities settlements in U.S. history at the time they were resolved. Mr. Jarvis also has been involved in a number of actions before the Delaware Chancery Court, including a Delaware appraisal case that resulted in a favorable decision for the firm's client after trial. At the present time, he has primary responsibility for a number of cases in which Grant & Eisenhofer clients have opted-out of class actions, and has also played a lead role in class actions against Tyco, Alstom and Sprint.

Mr. Jarvis received a B.A. in 1980 from Cornell University, where he was elected to Phi Beta Kappa. He graduated cum laude from Harvard Law School in 1984. Until 1986, he served as a staff attorney with the Federal Communications Commission, participating in the development of new regulatory policies for the telecommunications industry. He then became an associate in the Washington office of Rogers & Wells, principally devoted to complex commercial litigation in the fields of antitrust and trade regulations, insurance, intellectual property, contracts and defamation issues, as well as counseling corporate clients in diverse industries on general legal and regulatory compliance matters. Mr. Jarvis was previously associated with a prominent Philadelphia litigation boutique and had first-chair assignments in cases commenced under the Pennsylvania Whistleblower Act and in major antitrust, First Amendment, civil rights, and

complex commercial litigation, including several successful arguments before the U.S. Court of Appeals for the Third Circuit.

Mr. Jarvis authored "State Appraisal Statutes: An Underutilized Shareholder Remedy," *The Corporate Governance Advisor*, May/June 2005, Vol. 13, #3, and co-authored with Jay W. Eisenhofer and James R. Banko, "Securities Fraud, Stock Price Valuation, and Loss Causation: Toward a Corporate Finance-Based Theory of Loss Causation," *Business Lawyer*, Aug. 2004.

John C. Kairis

John Kairis is a director at Grant & Eisenhofer, where he represents institutional investors in class action litigation, individual "opt-out" securities litigation, and derivative and corporate governance litigation in the Delaware Chancery Court and other courts throughout the country. He has been a leader of G&E teams that have achieved some of the largest recoveries in securities class action history, and played major roles in the *Tyco*, *Parmalat*, *Marsh & McLennan*, *Hollinger International* and *Dollar General* securities class actions, and opt-out actions in *AOL Time Warner* and *Telxon Corporation*. Among his Delaware Chancery Court litigation experience is a landmark case against HealthSouth, involving a books and records trial under Section 220 of the Delaware General Corporations Law, to obtain certain documents that the corporation refused to produce, which led to a settlement implementing corporate governance improvements, such as HealthSouth's agreement to replace its conflicted directors with independent directors approved by a committee which included the institutional investor plaintiff.

Mr. Kairis has also been instrumental in prosecuting consumer class actions involving unfair competition and false marketing claims against both Johnson & Johnson and Bausch & Lomb, and is currently prosecuting off-label marketing cases brought under the federal False Claims Act and various state counterpart false claims acts. Mr. Kairis currently represents the lead plaintiffs and the class in a securities fraud suit against Merck & Co. and certain of its officers and directors relating to the defendants' alleged suppression of test results of Merck's cholesterol medication Vytorin, the lead plaintiffs in a securities class action against Apollo Group and certain of its officers and directors relating to the defendants' participation in a fraudulent accounting scheme, and the lead plaintiffs in various breach of fiduciary duty cases pending in the Delaware Chancery Court.

Mr. Kairis has authored articles including "Shareholder Proposals For Reimbursement Of Expenses Incurred In Proxy Contests: Recent Guidance From The Delaware Supreme Court," *PLI*, What All Business Lawyers Must Know About Delaware Law Developments 2009 (New York, NY May 21, 2009) (co-authored with Stuart Grant); "Challenging Misrepresentations in Mergers: You May Have More Time Than You Think," *Andrews Litigation Reporter*, Vol. 12, Issue 3, June 14, 2006; "Disgorgement Of Compensation Paid To Directors During The Time They Were Grossly Negligent: An Available But Seldom Used Remedy," *Delaware Law Review*, Vol. 13, #1, 2011; and was the principle writer of an *amicus brief* to the United States Supreme Court on behalf of various public pension funds in the *Merck* case involving the standard for finding that a plaintiff is on "inquiry notice" of potential claims such that the limitations period for pleading securities fraud has commenced.

Mr. Kairis is a 1984 graduate of the University of Notre Dame and a 1987 graduate of the Ohio State University Moritz College of Law, where he was Articles Editor of the *Ohio State Law Journal* and recipient of the American Jurisprudence and John E. Fallon Memorial Awards for scholastic excellence. He is a member of the Delaware and American Bar Associations and the Delaware Trial Lawyers Association. Mr. Kairis has served on the boards of several nonprofit organizations, including the West-End Neighborhood House, Inc., the Cornerstone West Development Corporation, and the board of the Westover Hills Civic Association. He has also served on the Delaware Corporation Law Committee, where he evaluated proposals to amend the Delaware General Corporation Law.

Adam J. Levitt

Adam J. Levitt is a director at Grant & Eisenhofer P.A. and leads the Firm's Consumer Practice Group. He specializes in complex commercial litigation, class action, and mass tort litigation in the areas of consumer protection, antitrust, securities, technology, and agricultural law. Mr. Levitt served as co-lead counsel in two of the largest agricultural and biotechnology class actions in recent years, recovering more than \$1 billion in damages for the plaintiffs: *In re Genetically Modified Rice Litigation*, in which Mr. Levitt has obtained settlements exceeding \$900 million on behalf of long-grain rice producers and others who suffered losses resulting from contamination of the U.S. rice supply with unapproved, genetically modified seeds; and *In re StarLink Corn Products Liability Litigation*, where he recovered \$110 million on behalf of farmers who sustained market losses on their corn crops arising from contamination of the U.S. corn supply with genetically-modified StarLink corn.

Mr. Levitt is "AV" rated by Martindale Hubbell. He has been recognized in *Illinois Super Lawyers* for the past several years, acknowledged by Lawdragon as one of the leading lawyers in America, and has been named "Litigator of the Week" by *American Lawyer Magazine*.

With one of the country's leading consumer litigation practices, Mr. Levitt has successfully served as counsel in numerous class and complex litigation cases at both the state and federal courts, on the trial and appellate court levels. His current cases include several notable consumer actions: *In re Honey Transshipping Litigation*; *In re Porsche Cars North America Inc., Plastic Coolant Tubes Product Liability Litigation*; *In re Stryker Rejuvenate and ABG II Hip Implant Litigation*; *Belville v. Ford Motor Company*; *In Re: Dial Complete Marketing and Sales Litigation*; and *In re Wesson Oil Marketing and Sales Practices Litigation*.

Mr. Levitt serves as President of the Class Action Trial Lawyers, a division of the National Trial Lawyers, of which he is an Executive Committee Member. Since 2005, Mr. Levitt has served as an elected member of the American Law Institute and a member of the American Association for Justice. Mr. Levitt sits on the Board of Advisors for the Chicago chapter of the American Constitution Society for Law and Policy. In 2013, he became an Advisory Board Member of the Institute for Consumer Antitrust Studies. Mr. Levitt is also a peer reviewer of articles submitted to AAJ's *Trial* magazine.

Mr. Levitt has authored numerous articles on class action litigation and consumer protection; his most recent publications include: "The Ascertainability Fallacy and Its Consequences," *AAJ Class Action Litigation Newsletter*, Spring 2015; "Fees Obliterate Managed Futures Fund Profits," *Financial Advisor*; "Supreme Court to Revisit the Fraud on the Market Presumption of

Reliance in Securities Fraud Cases,” *AAJ Class Action Litigation Newsletter*, Winter 2014; “Calculating Damages in Securities Class Actions,” *TRIAL*, Vol. 49, No. 6.; “The Role and Function of Corporate Representatives at Trial,” *The Trial Lawyer*, Vol. II, No. IV; “Multidistrict Litigation Practice: The Function and Shifting Focus of the JPML in Class Action and Other ‘Bet the Company’ Litigation,” chapter from *Straight from the Top: Case Studies in the World of Litigation*; “Sticky Situations in Mass Tort Settlements,” *TRIAL*, Vol. 48, No. 11; “CAFA and Federalized Ambiguity: The Case for Discretion in the Unpredictable Class Action,” 120 *Yale Law Journal Online* 231; and “Taming the Metadata Beast,” *New York Law Journal*; “The Big Business Wish List: Proposed Illinois Supreme Court Rule 225 and the Demolition of Consumer Rights,” *The Class Act*, 2005; “Foreign Investors Serving as Lead Plaintiffs in U.S.-Based Securities Cases,” *Association of Trial Lawyers of America*, 2005; “Proposed Rule 225: A Death Warrant for Class Actions in Illinois,” *Illinois Bar Journal*, 2005; “An Illinois Lawyer’s Guide to Service of Process in Mexico,” *Illinois Bar Journal*, 1994.

In addition to his writings, Mr. Levitt is a frequent speaker on topics of consumer protection, multidistrict litigation, biotechnology, corporate governance, securities litigation, and Internet privacy. Mr. Levitt has also testified before the Illinois Supreme Court Rules Committee on class action practice and related issues. In addition to chairing Law Seminars International’s “Litigating Class Actions” annual conference in Chicago, Mr. Levitt’s recent speaking engagements include:

- “Rage Against the Machine: Breaking Down the Best-Schooled Corporate Executives at Deposition and Trial,” Trial Lawyers Summit, 2015;
- “Criteria Approving Class Action Settlements,” The Duke Law Center for Judicial Studies -- Class Action Settlement Conference, 2015;
- “Consumer Litigation Roundtable: Judicial Perspectives on the Management of Class Action Cases,” Perrin Class Action Litigation Conference -- Chicago 2015 (Conference Co-Chair);
- “Challenges to Ascertainability, “Fail-Safe” Classes, Standing, and Class Member Injury,” CBA Class Action Conference: Challenges to Class Membership, 2015;
- “Litigation Background and Update: In re Syngenta AG MIR 162 Corn Litigation,” Syngenta GMO Corn Webinar, 2015;
- “Commentator -- Writing Better Jury Instructions: Antitrust as an Example,” 15th Annual Loyola Antitrust Colloquium, 2015;
- “Lessons Learned: Trial, Discovery, and the Business of Practicing Law,” Trial Lawyers Summit, 2014;
- “Lessons on Motions to Dismiss From Other Car Defect Cases,” HarrisMartin’s MDL Conference: General Motors Ignition Switch Recall Litigation, 2014;
- “The Process that Works” -- “Class Action Mediation LIVE!”, 18th Annual National Institute on Class Actions, 2014;
- “Making Your Parents Proud: Crafting a Meaningful Settlement,” AAJ-NACA Consumer Warranty Class Action Litigation Seminar, 2014;
- “Litigating the Class Action: In re General Motors Ignition Switch Litigation,” AAJ Education’s Plaintiff-Only Hot Topics and Trends in Litigation Seminar: GM Auto Recall, 2014;
- “Corporate Governance, Arbitration By-Laws, and Foreign Securities Litigation,” IPPFA Midwest Pension Conference, 2014;

- "Fighting the Class Action Battle: What Every Lawyer Needs to Know About Filing the Class Certification Motion," Trial Lawyers Summit, 2013;
- "Consumer Class Actions in a Post-Concepcion World," The Shifting Landscape of Class Litigation, 2013 "Recent Developments in the Supreme Court, Seventh Circuit and Northern District of Illinois," Litigating Class Actions, 2013;
- "Current Trends in Consumer Litigation," Grant & Eisenhower Consumer Litigation Breakfast Briefing, 2013;
- "Supreme Court Review," Global Shareholder Activism Conference, 2013;
- "Using Litigation to Enforce and Protect Food Labeling and Crop Standards," Animals as Food: The Legal Treatment of Animals in Contemporary Agribusiness and Factory Farming, 2013;
- "Access to Justice after Iqbal and Twombly," American Constitution Society Georgia Lawyer Chapter, 2013;
- "Disaster Averted, Mass Tort Resolved - Settling Mass Tort Disaster Cases," American Bar Association, Section of Litigation Annual Conference, 2013;
- "Recent Developments in Class Action Settlement Jurisprudence," American Association for Justice, 2013 Annual Convention;
- "The JPML's 1404/1407 Shift and the End of Reflexive Transfer," Aggregate Litigation After Class Actions Conference of Law Seminars International, 2013;
- "Deposing the Corporate Machine: How to Win Against the Best-Schooled Corporate Executive," Trial Skills Retreat: Empowering Witnesses Conference by 360 Advocacy Institute, 2013;
- "Manifestation of Defect That Causes Actual Injury in Economic Defect Related Class Actions," 2013 National Consumer Class Action Litigation & Management Conference;
- "Trial Lawyers and Class Actions: Protecting Consumers and Elevating Your Practice," Trial Lawyers Summit, 2012;
- "Lead Plaintiff 'Pickoffs', Offers of Judgment, Moving to Dismiss Class Allegations, and Other Early Attacks on the Class Process," Litigating Class Actions Conference of Law Seminars International, 2012;
- "MERS Litigation: Justice for Illinois Counties," Illinois Association of County Clerks & Records Annual Conference, 2012;
- "Class Actions in Medical Device and Pharmaceutical Litigation," HarrisMartin TVM/Actos Litigation Conference, 2012;
- "The Evolution of the Class Action Notice," Class Actions -- Plaintiff & Defense Perspectives, 2012;
- "Removal, Remand, and Claims Asserted -- Strategic Considerations in MERS Litigation," American Association for Justice, Mortgage Electronic Registration System (MERS) Teleseminar, 2012;
- "Thinking About Trial from Day One," American Association for Justice, 2012 Annual Convention;
- "Litigation at Sunrise -- The Basics of the MERS System," American Association for Justice, 2012 Annual Convention;
- "Class Action Litigation and Victim Services," 38th NOVA Conference, 2012;
- "Modifying Your Approach for Multi-State Class Actions," Litigating Class Actions (Seattle), 2011;
- "Multi-State Litigation in the Post-CAFA World," Litigating Class Actions (Chicago), 2011;
- "Imprelis Herbicide Litigation Spotlight," HB Litigation Conferences, 2011;

- "Ethical Implications of Class Action and Mass Tort Settlements," American Association for Justice, Summer Conference, 2011;
- "Current Developments in Consumer Protection Litigation," 11th Annual Class Action/Mass Tort Symposium, 2011;
- "Privacy Litigation: The Evolution in Theories and Outcomes," International Association of Privacy Professionals "Privacy Academy," 2009;
- "Securities Litigation Update," 2008 Class Action Institute;
- "Legal Strategies to Fight Negative Effects of Genetic Engineering," Public Interest Environmental Law Conference 2007;
- "Corporate Governance Developments," Financial Management Association -- 2005 Conference.

Mr. Levitt graduated *magna cum laude* from Columbia University in 1990 and received his J.D. from Northwestern University School of Law in 1993.

Megan D. McIntyre

Megan McIntyre is a director at Grant & Eisenhofer, practicing in the areas of corporate, securities and complex commercial litigation. Among other work, she has represented institutional investors, both public and private, in corporate cases in the Delaware Court of Chancery as well as in securities class actions in federal courts throughout the country that have resulted in significant recoveries. She was a member of the trial team in *In re Safety-Kleen Corp. Bondholders Litigation*, which ended in settlements and judgments totaling approximately \$280 million after six weeks of trial, and she played a lead role in *In re Refco Inc. Securities Litigation*, which culminated in recoveries exceeding \$400 million. Ms. McIntyre was also a member of the litigation teams that represented the plaintiffs in two cases whose settlements rank among the largest in the history of the Delaware Court of Chancery: *In re El Paso Corp. Shareholder Litigation*, which settled for \$110 million, and *American International Group, Inc. Consolidated Derivative Litigation*, which settled for \$90 million.

In addition to her work on behalf of investor plaintiffs in class and derivative litigation, Ms. McIntyre has represented institutional investors who have opted out of federal securities class actions to pursue separate actions, resulting in recoveries that exceeded what they would have received as class members. Ms. McIntyre has also successfully represented clients in obtaining access to corporate proxy statements for the purpose of presenting proposed shareholder resolutions, and has brought and defended actions seeking to enforce shareholders' rights to inspect corporate books and records pursuant to the statutory authority of Section 220 of the Delaware General Corporation Law.

Ms. McIntyre has appeared as a guest on CNBC's "On the Money," and on September 13, 2012 she was featured as "Litigator of the Week" in *The AmLaw Litigation Daily* for her work in the *In re El Paso Corp. Shareholder Litigation*.

Ms. McIntyre graduated from The Pennsylvania State University in 1991 and graduated *magna cum laude* in 1994 from The Dickinson School of Law. In 2013, she was selected as one of the Lawdragon 500 Leading Lawyers of America.

Gordon Z. Novod

Gordon Novod is a director at Grant & Eisenhofer P.A., focusing his practice on corporate restructuring and creditors' rights. He has more than thirteen years of experience representing *ad hoc* and official committees, distressed investors, lenders, indenture trustees, trade creditors, and other parties in some of the most complex landmark restructurings.

Mr. Novod's industry experience spans the automotive, chemical, construction, energy, entertainment, gaming, manufacturing, media, and retail sectors. He has negotiated, drafted, and litigated all aspects of Chapter 11 plans of reorganization, valuation, and plan confirmation proceedings, contested debtor-in-possession financing and cash collateral use, the pursuit of fraudulent conveyance actions, and other matters involving bankruptcy motion and litigation practice. He also has extensive experience reviewing, advising clients on, and litigating with respect to corporate and credit documents, including indentures, credit agreements, inter-creditor agreements, security agreements, and other lending documents concerning corporate debt and complex capital structures.

Mr. Novod prides himself on providing high quality advocacy to clients, keeping their business objectives in mind, thereby enabling him to build lasting relationships. He is also able to grasp complex legal and business issues in order to craft and implement innovative, yet practical solutions to maximize value for clients.

On numerous occasions, Mr. Novod has been acknowledged for his work as a restructuring attorney. In 2011, Law360 called him one of the "Rising Stars" in restructuring and "one of the five bankruptcy attorneys under 40 to watch." He was also named a finalist in the M&A Advisor's "40 under 40." The following year, he was recognized as a "Winner of the 2012 40 Under 40 East M&A Advisor Recognition Awards" and New York Super Lawyers – Bankruptcy, "Rising Stars." In 2013 and 2014, he was selected to New York Metro Super Lawyers in Bankruptcy. In addition, he serves on the New York City Bar Association's Committee on Bankruptcy and Corporate Reorganization.

Prior to joining G&E, Mr. Novod was a partner in the bankruptcy & corporate restructuring group at Brown Rudnick in New York. He also formerly practiced in the corporate restructuring and bankruptcy group at Kramer Levin Naftalis & Frankel LLP.

Mr. Novod's prominent engagements include:

- Caesars Entertainment Operating Company, Inc. (unsecured bondholder and proposed class representative)
- ShengdaTech, Inc. (ad hoc noteholder committee)
- Tribune Company (indenture trustee)
- Central European Distribution Corporation (ad hoc committee of convertible noteholders)
- Lyondell Chemical Company (creditors' committee)
- Herbst Gaming, Inc. (creditors' committee)
- Lehman Brothers (ad hoc consortium of claimholders of Lehman Brothers Special Financing, Inc.)
- Green Valley Ranch Gaming, LLC (ad hoc committee of second lien lenders)

- Palm Harbor Homes, Inc. (indenture trustee)
- Equisearch Services, Inc. (trade creditor)
- General Motors Corporation (n/k/a Motors Liquidation Company) (creditors' committee)
- Charter Communications, Inc. (ad hoc first lien lenders)
- Midway Games, Inc. (secured lender)
- Bethlehem Steel Corp. (creditors' committee)
- WCI Steel, Inc. (ad hoc noteholders' committee and indenture trustee)
- Delphi Corp. (trade creditor and member of the creditors' committee)
- Grace Industries, Inc. (creditors' committee)
- Wave Wireless Corp. (secured lender)
- Diomed, Inc. (licensor and chairman of the creditors' committee)
- TransCare Corp. (creditors' committee)
- Buffets Holdings, Inc. (ad hoc noteholders' committee)
- ASARCO LLC (majority bondholders)
- Bridgeport Holdings, Inc. (Micro Warehouse, Inc.) (debtors)
- WestPoint Stevens, Inc. (second lien agent)

Mr. Novod has lectured on indenture analysis and fraudulent conveyance litigation.

James J. Sabella

James Sabella is a director at Grant & Eisenhofer. He has over thirty-five years of experience in complex civil litigation, including representing plaintiffs and defendants in class and derivative actions involving trial and appellate work in state and federal courts. He has substantial experience in securities litigation and litigation involving claims against accounting firms and underwriters. He has also handled antitrust litigation, whistleblower claims and cases involving claims under the False Claims Act, and cases involving the fiduciary obligations of trustees under state law.

Mr. Sabella has represented the lead plaintiffs in numerous major cases that have resulted in large recoveries, including the General Motors securities litigation, where the settlement was in excess of \$300 million, and the Refco securities litigation, where the recovery was in excess of \$400 million. He also represented the lead plaintiffs in the Parmalat securities litigation, which resulted in landmark opinions establishing that the international firms that coordinate the audit services that audit firms conduct in various countries can be held liable for the conduct of such local audit firms.

Prior to joining Grant & Eisenhofer, Mr. Sabella practiced for twenty-eight years at several large Manhattan law firms, most recently as a partner in Sidley, Austin, Brown & Wood LLP, where his practice focused largely on accountants' liability defense, including the defense of actions alleging securities law violations and professional malpractice as well as grand jury investigations and investigations by the American Institute of Certified Public Accountants.

Mr. Sabella is a 1976 graduate of Columbia Law School, where he was a member of the Board of Directors of the *Columbia Law Review*. He received a B.A. *summa cum laude* from Columbia College in 1972 and a B.S. in 1973 from the Columbia School of Engineering, where he was valedictorian.

Mary S. Thomas

Mary Thomas is a director at Grant & Eisenhofer. She spent twelve years practicing business litigation with two of Los Angeles' leading law firms before joining Grant & Eisenhofer in 2006. Her experience prior to Grant & Eisenhofer includes trade secret and intellectual property matters, contract actions, employment defense, consumer class action defense, insurance disputes and environmental matters.

At Grant & Eisenhofer, Ms. Thomas represents institutional investors in class action securities and shareholder litigation and individual relators in false claims act cases. Ms. Thomas represented the lead plaintiffs in the Marsh & McLennan securities litigation, which resulted in a \$400 million settlement. In Delaware Chancery Court, Ms. Thomas successfully represented investors in the ACS shareholders litigation. Ms. Thomas currently represents the relator in a Delaware False Claims and Reporting Act case concerning unclaimed gift card balances.

Ms. Thomas served as a volunteer arbitrator for the L.A. County Bar Association and as a volunteer mediator for the L.A. Superior Court and now serves as a volunteer guardian *ad litem* through Delaware's Office of the Child Advocate. She co-authored "California Wage and Hour Laws" (published by the National Legal Center for the Public Interest, January 2005) and was one of several authors of the 10th and 11th editions of the *California Environmental Law Handbook*.

Ms. Thomas graduated *magna cum laude* from Harvard Law School in 1994 and *magna cum laude* from the University of Delaware in 1991.

Joseph R. "Beau" Biden III

Beau Biden is of counsel at Grant & Eisenhofer. Prior to joining G&E, he served as Delaware's 44th Attorney General, from 2007-2015.

Mr. Biden's career as a prosecutor began with the United States Attorney's Office in Philadelphia. He previously served for two years as counsel in the Office of Policy Development, where he worked to protect missing and exploited children, reduce gun violence and prevent domestic violence.

As Attorney General, Mr. Biden's work on behalf of homeowners helped many families avoid foreclosure, and his leadership led to more than \$185 million in financial benefits for individual Delaware families and government agencies that assist homeowners and pursue accountability. In 2012, he established the Office of Foreclosure Prevention and Financial Education as well as the Delaware Mortgage Mediation Program to help homeowners keep their residences. Under Mr. Biden's leadership, the Delaware Department of Justice participated in settlements with three of the nation's largest banks, making Delaware one of only four states to do so.

In 2007, Mr. Biden helped launch Delaware's Child Predator Task Force. In 8 years, the CPTF removed more than 210 predators from neighborhoods and rescued more than 120 children from abusive situations. Mr. Biden also successfully sought legislation that imposes mandatory prison sentences on those who deal in child pornography and predators who troll for child victims online. In 2014, he and his office worked to develop legislation that gives Delaware law enforcement new tools to stop human trafficking and help victims rebuild their lives.

Mr. Biden is an advocate for senior citizens, cracking down on criminals who exploit and abuse the elderly, protecting survivors of domestic violence, strengthening communities by combating crime on the local level and protecting the environment by punishing illegal polluters and enforcing Delaware's open government laws.

Mr. Biden currently serves as a Major in the Delaware Army National Guard and returned from a year-long deployment supporting Operation Enduring Freedom in Iraq in September 2009. He has also served as Interim Legal Advisor for the United States Department of Justice in post-war Kosovo, helping the war-torn nation develop a law enforcement and criminal justice system.

Richard S. Schiffrin

Richard S. Schiffrin is of counsel at Grant & Eisenhofer. He has represented institutional investors and consumers in securities and consumer class actions worldwide. In 2008, Mr. Schiffrin retired as a founding partner of Schiffrin Barroway Topaz & Kessler, LLP.

Mr. Schiffrin has been recognized for his expertise in many prominent cases, including *In re Tyco International Ltd. Securities Litigation*, the most complex securities class action in history, which resulted in a record \$3.2 billion settlement. The \$2.975 billion payment by Tyco represents the single largest securities class action recovery from a single corporate defendant in history, while the \$225 million settlement with PricewaterhouseCoopers (PwC) represents the largest payment PwC has ever paid to resolve a securities class action and is the second-largest auditor settlement in securities class action history; *In re AremisSoft Corp. Securities Litigation*, a complex case involving litigation in four countries, resulting in a \$250 million settlement providing shareholders with a majority of the equity in the reorganized company after embezzlement by former officers; *In re Tenet Healthcare Corp.*, resulting in a \$216.5 million settlement and which led to several important corporate governance improvements; *Henry v. Sears, et al.*, one of the largest consumer class actions in history which resulted in a \$156 million settlement distributed without the filing of a single proof of claim form by any class member; *Wanstrath v. Doctor R. Crants, et al.*, a derivative action filed against the officers and directors of Prison Realty Trust, Inc., challenging the transfer of assets to a private entity owned by company insiders, resulting in corporate governance reform in addition to the issuance of over 46 million shares to class members; *Jordan v. State Farm Insurance Company*, resulting in a \$225 million settlement and other monetary benefits for current and former State Farm policy-holders; and *In re Sotheby's Holdings, Inc. Derivative Litigation*, resulting in a multi-million dollar settlement and significant governance changes.

Mr. Schiffrin is an internationally renowned speaker and lectures frequently on corporate governance and securities litigation. His lectures include: the MultiPensions Conference in Amsterdam, Netherlands; the Public Funds Symposium in Washington, D.C.; the European Pension Symposium in Florence, Italy; and the Pennsylvania Public Employees Retirement Summit (PAPERS) in Harrisburg, Pennsylvania. Mr. Schiffrin has also taught legal writing and appellate advocacy at John Marshall Law School and served as a faculty member at legal seminars, including the Annual Institute on Securities Regulation, NERA: Finance, Law & Economics - Securities Litigation Seminar, the Tulane Corporate Law Institute, and the CityBar Center for CLE (NYC): Ethical Issues in the Practice of Securities Law.

Mr. Schiffrin is a graduate of DePaul Law School and attended graduate school at the University of Chicago. After protecting the civil rights of clients for seven years as an Assistant Public Defender with the Office of the Public Defender of Cook County, where he tried hundreds of

cases, Mr. Schiffrin founded Schiffrin & Craig, Ltd., representing consumers and individual investors in actions brought against public companies. He is licensed to practice law in Pennsylvania and Illinois and has been admitted to practice before numerous United States District Courts.

Thomas V. Ayala

Thomas V. Ayala is senior counsel at Grant & Eisenhofer, focusing on complex pharmaceutical and medical device litigation. Mr. Ayala has handled all phases of mass tort and personal injury litigation from commencement through trial and appeals. He has also assembled and worked with numerous interdisciplinary teams of medical and scientific expert witnesses to support clients' legal claims, and he has served as first-chair cross-examiner of adversarial experts and other witnesses in product liability litigation. Mr. Ayala is actively representing injured victims in cases against major pharmaceutical companies, medical device manufacturers, and manufacturers in other industries.

Prior to his representation of injured individuals and victims of consumer fraud, Mr. Ayala worked for an international firm serving as national counsel in numerous mass tort proceedings, including pharmaceutical, medical device, environmental exposure, and other complex personal injury proceedings, including multidistrict litigation proceedings.

Immediately following law school, Mr. Ayala was a law clerk to Judge Eduardo C. Robreno of the U.S. District Court for the Eastern District of Pennsylvania, where he assisted the judge in presiding over seven jury trials and was actively involved in the administration of matters arising under federal and state law.

Mr. Ayala earned his J.D., *summa cum laude*, from Villanova University School of Law in 2004, where he served as editor-in-chief of the *Villanova Law Review* and was named to the Order of the Coif. While at Villanova, Mr. Ayala served as an intern to the late Judge Charles R. Weiner. From 2010-2014, he has been listed as a Rising Star in the *Super Lawyers* and *Philadelphia* magazines.

Peter A. Barile III

Pete Barile is senior counsel at Grant & Eisenhofer, resident in the New York office. Mr. Barile litigates federal antitrust and commodity class actions and other complex matters. He has extensive experience representing both plaintiffs and defendants, providing him insight into how the other sides work, benefitting clients he represents, whether plaintiff classes, opt-outs, individual competitors, or defendants. In addition to his work in federal district courts, Mr. Barile has substantial experience before the Judicial Panel on Multidistrict Litigation, federal Circuit Courts of Appeal, and the United States Supreme Court. Prior to joining Grant & Eisenhofer, he practiced both in New York and in Washington D.C., with major defense law firms renowned for their leading antitrust practices.

Mr. Barile currently devotes a substantial amount of his practice to antitrust and commodity class action litigation involving the financial services industry in the Southern District of New York. Among the matters in which Mr. Barile is involved representing class plaintiffs are: *In re Aluminum Warehousing Antitrust Litigation* (co-lead counsel); *In re London Silver Market, Ltd.*

Antitrust Litigation (co-lead counsel), and *In re Zinc Antitrust Litigation* (co-lead counsel), as well in the *Cotton*, *Crude Oil*, *Gold*, *LIBOR*, and *ISDAfix* cases, among other matters. He also has substantial experience litigating high-tech antitrust cases in the Northern District of California, including: *In re Online DVD Antitrust Litigation* (lead counsel); *In re Lithium Ion Batteries Antitrust Litigation* (executive committee); and *In re High Tech Employees Antitrust Litigation* (class counsel).

Mr. Barile's reported cases include: *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007) (lead counsel for *amicus curiae* Consumer Federation of America in landmark antitrust case on resale price fixing); *Metallgesellschaft AG v. Sumitomo Corp. of America*, 325 F.3d 836 (7th Cir. 2003) (represented opt-out plaintiffs in a leading antitrust case on international copper commodities trading); *Empagran S.A. v. F. Hoffmann-LaRoche, Ltd.*, 417 F.3d 1267 (D.C. Cir. 2005) (represented *amicus curiae* in appeal concerning the Foreign Trade Antitrust Improvements Act (FTAIA)); *In re Online DVD Rental Antitrust Litigation*, 2010 U.S. Dist. LEXIS 138558 (2010) (obtained certification of 40 million member class of subscribers to Netflix against Netflix and Wal-Mart); *In re Rail Freight Fuel Surcharge Antitrust Litigation*, 593 F. Supp. 2d 29, *aff'd*, 602 F.3d 444, *cert. denied*, 131 S. Ct. 822 (2010) (obtained dismissal, affirmance, and denial of *certiorari* in an indirect purchaser price fixing class action against major national railroads); *In re LTL Shipping Services Antitrust Litigation*, 2009 U.S. Dist. LEXIS 14276 (N.D. Ga. 2009) (obtained dismissal of price fixing class action brought against major trucking companies); *In re Southeastern Milk Antitrust Litigation*, 555 F. Supp. 2d 934 (2008) (defeated motion to dismiss price fixing and monopolization claims brought on behalf of classes of dairy farmers); *In re Medical Residents Antitrust Litigation*, 339 F. Supp. 2d 26 (D.D.C. 2004), *aff'd*, 2006 U.S. App. LEXIS 14079 (D.C. Cir. 2006), *cert. denied*, 549 U.S. 1156 (2007) (obtained dismissal of price fixing class action alleging conspiracy in the hiring and compensation of medical residents); *Omnicare, Inc. v. United Health Group, Inc.*, 524 F. Supp. 2d 1031 (N.D. Ill. 2007) (prosecuted precedent-setting private action for pre-merger gun jumping conspiracy under Section 1 of the Sherman Act).

Mr. Barile's *pro bono* work includes: *Giles v. State of California* 554 U.S. 353 (2008), in which he served as lead counsel in the U.S. Supreme Court for *amicus curiae* Battered Women's Justice Project, in a case concerning the scope of the Confrontation Clause of the United States Constitution.

Mr. Barile has published numerous articles and served as a panelist or speaker on antitrust issues. His work has been cited by the Federal Trade Commission and the Antitrust Modernization Commission, as well as leading academics and practitioners. He has authored or co-authored the following: *Milton Handler, Dean of Antitrust*, in *Yale Biographical Dictionary of American Law* (2010); *Pattern Exception to Sham Litigation*, *Antitrust Exemptions & Immunities Update* (2009); *Private Right of Action for Pre-Merger Gun Jumping Recognized*, *Antitrust Litigator* (2008); *Supreme Court Confirms Viability of Predatory Bidding Claims*, *Business Law Today* (2007); *Antitrust Damages Resulting from Meritorious Patent Litigation*, *Antitrust Exemptions & Immunities Update* (2007); *Antitrust's New Big Brother*, *Business Law Today* (2006); *Antitrust in Wartime*, *Antitrust* (2003); *Health Care Providers and a Market Participation Exception to State Action Immunity*, *Antitrust Report* (2000); *The Microsoft Case*, *Connecticut Law Review* (Symposium Editor) (1999). He has contributed to the following books and treatises: *Indirect Purchaser Antitrust Litigation Handbook* (forthcoming, 2014); *Antitrust Law Developments* (Seventh) (2012); *Annual Review(s) of Antitrust Developments* (2008-11);

Antitrust & Trade Associations (2009); Antitrust & International Intellectual Property Licensing (2008); Antitrust Law Developments (Sixth) (2007); Annual Review(s) of Antitrust Developments (2005-06); Unfair Trade Practices (2003). His speaking engagements include: Panelist, ABA, Sham Litigation: Claiming and Defeating Antitrust Immunity (2011); Panelist, ABA, Fundamentals of Antitrust Exemptions & Immunities (2010); Moderator, ABA, Now the Feds Can Wiretap Suspected Antitrust Offenders (2006); Introduction, The Microsoft Case, Connecticut Law Review Symposium (1999).

Mr. Barile is active in the antitrust bar, having held a number of leadership posts in the ABA and other bar associations. He serves on the Advisory Board of the Loyola Institute for Consumer Antitrust Studies. He is a member of the Competition Editorial Advisory Board of *Law360*, a leading legal publication. Mr. Barile graduated from the University of Connecticut in 1991 with a bachelor of arts in English, and received his J.D. from the University of Connecticut School of Law in 1999.

Deborah A. Elman

Deborah Elman is senior counsel at Grant & Eisenhofer. Ms. Elman focuses on securities fraud and derivative cases at Grant & Eisenhofer. Prior to joining Grant & Eisenhofer as an associate, Ms. Elman represented clients before the SEC and participated in numerous appearances before federal and state courts as an associate at a leading New York law firm.

Ms. Elman served as a law clerk for the Honorable William L. Standish, United States District Judge, in the United States District Court for the Western District of Pennsylvania, participating in all aspects of federal trial court practice.

Ms. Elman graduated *cum laude* in 2001 from the University of Pittsburgh School of Law, where she was Lead Executive Editor of the *Journal of Law and Commerce* and received the Horowitz Graduate Student Paper Prize, the National Association of Women Lawyers Law Student Achievement Award and the School of Law Community Service Award. She received a Masters of Public Health degree in 1997 from Columbia University, where she graduated *cum laude* with a Bachelor of Arts degree in 1995.

David T. Fischer

David Fischer is senior counsel at Grant & Eisenhofer. He has spent over a decade representing plaintiffs and defendants in complex litigation and antitrust litigation. Mr. Fischer's complex litigation practice has involved federal and state civil, criminal and administrative fraud investigations and litigation. He has been involved in numerous cases involving multi-million dollar recoveries in False Claim Act actions.

Mr. Fischer represented the lead whistleblowers in a *qui tam* action under the False Claims Act alleging fraud by Merck-Medco, a national pharmacy benefit management company ("PBM"), related to services performed for federal health plans. The Government intervened in the case, which was litigated aggressively for several years, and which was settled for approximately \$185 million just prior to summary judgment/trial.

Mr. Fischer is also an experienced antitrust litigation attorney, has been counsel in two antitrust trials and has defended companies facing Federal Trade Commission (FTC) merger investigations. In 2005, he helped obtain a multi-million jury verdict on behalf of Health Care Service Corporation (HCSC) in the first indirect-purchaser antitrust case to proceed to trial (Federal Court, District of Columbia). That lawsuit stemmed from a generic pharmaceutical company's anticompetitive conduct in the markets for lorazepam (generic equivalent of Ativan®) and clorazepate (generic equivalent of Tranxene®). After HCSC opted out of an underlying class settlement, and after several additional years of litigation, the case was tried to verdict in a month-long jury trial. Following verdict, the damages award for Plaintiffs was trebled and enhanced by the Court to nearly \$80 million.

Mr. Fischer has published numerous articles and served as a panelist or speaker on False Claims Act and antitrust issues. His speaking engagements include: "Reimbursement and False Claims Act Fundamentals," ABA Health Law Section (May 19, 2011, February 7, 2013); "In-House Counsel Update," ABA Section of Antitrust Law Corporate Counseling Committee (June 2, 2011); "False Claims Act Changes and Challenges," Department of Energy Contractor Attorneys' Association's (DOECAA) Spring Conference (May 13, 2010); "The Government's Crackdown on Clinical Research Misconduct," Drug Information Association's Liability Risks in Clinical Trials Program (February 25, 2010); and "Substantive and Procedural Motions," District of Columbia Bar Association CLE Program Pre-Trial Skills Series (October 22, 2009, October 29, 2010, October 20, 2011, November 29, 2012, and November 13, 2013). He has authored or co-authored the following: *Digital evidence searches in competition investigations: Best Practices for effective fundamental rights*, 4-2009 Concurrences, November 2009; *Dr. Miles: Will The Supreme Court Find a Cure?*, The Antitrust Source, February 2007; and *Cardizem CD®, K-Dur®, Plavix® and OxyContin®: Have We Entered the Endgame of Antitrust Uncertainty Towards Pharmaceutical Patent Litigation Settlements?*, Health Lawyers Weekly, December 15, 2006.

Mr. Fischer is active in the health care and antitrust bars, having held a number of leadership posts in the ABA. He is currently the vice chair of the ABA Section of Health Law's Healthcare Litigation and Risk Management Interest Group. He was also on the Planning Committee for, and a speaker at, the ABA's False Claims Act and Qui Tam Trial Institute (June 5-7, 2013).

Mr. Fischer's *pro bono* work has included representing disabled veterans and individuals in neglect and guardianship cases.

Mr. Fischer graduated from Miami University in 1996 with a Bachelor of Arts in English Literature and Political Science, and received his J.D. from the Georgetown University Law Center in 1999. Prior to joining Grant & Eisenhofer, Mr. Fischer worked in Washington D.C. for Shook, Hardy & Bacon where he frequently litigated health care *qui tam* cases.

Christine M. Mackintosh

Christine Mackintosh is senior counsel at Grant & Eisenhofer, practicing in the areas of corporate and securities litigation. She has represented institutional investors, both public and private, in corporate cases in the Delaware Court of Chancery and in securities fraud class actions in federal courts throughout the country.

Ms. Mackintosh has played significant roles in several landmark actions challenging mergers and acquisitions in the Delaware Court of Chancery, including *In re Del Monte Foods Company Shareholder Litigation*, which resulted in an \$89.4 million recovery for the class, and *In re El Paso Corporation Shareholder Litigation*, which resulted in a \$110 million recovery for the class. Ms. Mackintosh also played a significant role in *American International Group, Inc. Consolidated Derivative Litigation*, which resulted in a \$90 million recovery, one of the largest recoveries in a shareholder derivative action in the history of the Delaware Court of Chancery.

Ms. Mackintosh has also played a significant role in a number of securities fraud class actions that have achieved substantial recoveries for classes of investors, including *In re Refco Securities Litigation* (exceeding \$400 million) and *In re Merck & Co., Inc. Vytarin/Zetia Securities Litigation* (\$215 million), and on behalf of individual and institutional investors who have opted out of class actions to pursue individual suits, including representation of investors who opted out of *In re Bank of America Corporation Securities, Derivative & ERISA Litigation*. Outside of the United States, Ms. Mackintosh was a member of the team that secured the historic \$450 million pan-European settlement in the *Royal Dutch Shell* case and is currently representing numerous institutional investors in litigation against Royal Bank of Scotland in the United Kingdom. Ms. Mackintosh currently serves as co-lead counsel in *In re JP Morgan Chase & Co. Securities Litigation*.

Prior to joining Grant & Eisenhofer, Ms. Mackintosh practiced in the Philadelphia office of an international law firm, where she practiced in the areas of commercial, securities, and insurance recovery litigation.

A *magna cum laude* graduate of St. Joseph's University, Ms. Mackintosh earned her law degree at the University of Pennsylvania Law School. She is the co-author of two articles published by the Practising Law Institute's *Corporate Law & Practice Course Handbook Series*. "Ethical Issues and Their Impact on Securities Litigation," published in September-October, 2003, was co-authored with Marc J. Sonnenfeld, Viveca D. Parker and Marisel Acosta. "Lessons From Sarbanes-Oxley: The Importance of Independence In Internal Corporate Investigations," published in July, 2003, was co-authored with Alfred J. Lechner, Jr.

Amy Miller

Amy Miller is senior counsel at Grant & Eisenhofer. Ms. Miller focuses on merger & acquisitions, corporate governance litigation, and derivative cases at Grant & Eisenhofer.

Ms. Miller represents shareholders seeking accountability from corporate management on issues ranging from breach of fiduciary to corporate waste. While litigating these actions, she has secured significant monetary recoveries and corporate governance reforms in cases including *In re Jefferies Shareholder Litigation*, *In re News Corporation Shareholder Derivative Litigation*, *In re El Paso Corporation Shareholder Litigation*, and *In re ACS Shareholder Litigation*.

Prior to joining Grant & Eisenhofer, Ms. Miller worked at two prominent New York law firms. Ms. Miller also held an externship for the Honorable George B. Daniels, United States District Judge, in the United States District Court for the Southern District of New York, participating in all aspects of federal trial court practice.

Ms. Miller graduated *summa cum laude* in 2001 from New York Law School, where she was a Member & Articles Editor for the *New York Law School Law Review*. She graduated *magna cum laude* in 1995 with a Bachelor of Arts degree in psychology.

Brenda F. Szydlo

Brenda Szydlo is senior counsel at Grant & Eisenhofer. Ms. Szydlo has more than 25 years of experience in complex civil litigation in federal and state court on behalf of plaintiffs and defendants, with a particular focus on securities litigation and accountants' liability.

Ms. Szydlo represents institutional and individual investors in class and private actions that have resulted in significant recoveries, such as *In re Refco Securities Litigation*, where the recovery was in excess of \$407 million. She also represents institutional and individual investors in opt-out securities actions, such as investors who opted out of *In re Bank of America Corp. Securities, Derivative & ERISA Litigation*. Ms. Szydlo also has experience in mergers and acquisitions litigation, including playing a significant role in obtaining a ground-breaking order enjoining not only the shareholder vote on the merger, but the merger agreement's termination fee and other mechanisms designed to deter competing bids in *In re Del Monte Foods Co. Shareholder Litigation*.

Prior to joining Grant & Eisenhofer, Ms. Szydlo served as counsel in the litigation department of Sidley Austin LLP in New York, and its predecessor, Brown & Wood LLP, where her practice focused on securities litigation and enforcement, accountants' liability defense, and general commercial litigation.

Ms. Szydlo is a 1988 graduate of St. John's University School of Law, where she was a St. Thomas More Scholar and member of the Law Review. She received a B.A. in economics from Binghamton University in 1985.

Lisa B. Weinstein

Lisa Weinstein is senior counsel at Grant & Eisenhofer. She primarily focuses on representing women and children in birth injury and birth trauma litigation.

Prior to joining G&E, Ms. Weinstein founded The Weinstein Law Group, where she represented children who were victims of medical malpractice and birth injuries. In her practice as a plaintiffs' trial lawyer, Lisa has successfully litigated personal injury, medical malpractice and birth injury matters resulting in multi-million dollar settlements and verdicts.

Ms. Weinstein has been selected as a Rising Star by *SuperLawyers* and has been honored by The National Trial Lawyers in the "Top 40 Under 40" for the past four years. Ms. Weinstein has also been certified as an Arbitrator for the Circuit Court of Cook County and is an active member of the Birth Trauma Litigation Group.

Ms. Weinstein earned an undergraduate degree from the University of Michigan and graduated *cum laude* from DePaul University College of Law. While at DePaul University, she was a law journal editor and author for the *Journal of Art and Entertainment Law*. During this time, Ms. Weinstein also held internships at the U.S. Attorney's Office for the Northern District of Illinois,

with Corporation Counsel for the City of Chicago's Municipal Division, the Cook County Public Defender's Office, the Legal Assistance Foundation of Metropolitan Chicago and the Federal Defender Program.

Diane T. Zilka

Diane Zilka is senior counsel at Grant & Eisenhofer. For over a decade, Ms. Zilka has been in the forefront of the Firm's successful prosecution of securities fraud and corporate governance cases. As a member of numerous trial teams, Ms. Zilka has played a key role in achieving significant recoveries for funds managed by U.S. and international institutional investors and public pension plans. Representative cases include: *Safety Kleen Bondholder Litig.*, more than \$276 million in judgments and settlements; *In Re Merck & Co. Vytarin/Zetia Sec. Litig.*, \$215 million for investors—among the largest for a securities fraud case without a government finding of corporate wrongdoing; *In Re News Corp. S'holder Litig.*, \$139 million recovered for the company—one of the largest cash recoveries in the history of derivative shareholder litigation—and which resulted in significant corporate governance reforms; *Parmalat Securities Litig.*—the European "Enron" resulting in \$110 million recovery; *TRSL v. AIG*, \$115 million recovered for the company; *In Re Appraisal of Metromedia Int'l Group, Inc.*, a \$188 million judgment in what was only the second appraisal action of preferred shares in the history of Delaware Chancery Court. In the corporate governance arena, Ms. Zilka's cases have addressed such cutting-edge issues as the propriety of "proxy puts" and of "Don't Ask, Don't Waive" standstill provisions, the use of derivative securities in "poison pills," and the conflicted role of Wall Street banks as financial advisors to target corporations which, in *Del Monte Corp. S'holder Litig.*, resulted in a preliminary injunction of a \$5.3 billion leveraged buyout and an \$89.4 settlement for the shareholders. Ms. Zilka has successfully defended clients before the SEC in "no-action" proxy proposal challenges, and has successfully prosecuted "books and records" actions.

Ms. Zilka co-authored "The Role of Foreign Investors in Federal Securities Class Actions," 1442 PLI/CORP. 91 (2004) and "The Current Role Of Foreign Investors In Federal Securities Class Actions," 1620 PLI/Corp 11 (2007), cited in *Morrison v. National Australia Bank*, 561 U.S. 247 (2010). Ms. Zilka has lectured on federal class action litigation practice as well as on Delaware corporate law.

Ms. Zilka has concentrated her career in securities, corporate and complex commercial litigation. Before joining G&E, she was a partner in a prominent New York City law firm. Ms. Zilka has served as General Chair of the annual Combined Campaign For Justice which provides critical funding for Delaware's three legal services agencies. She is a member of the Carpenter-Walsh Delaware Pro Bono Inn of Court, and serves on the Board of Directors of Delaware Volunteer Legal Services, The Print Center of Philadelphia, and Panetiere Partners, three non-profit organizations.

Ms. Zilka graduated from the State University of New York at Binghamton in 1982, and received her J.D. from Fordham University School of Law in 1985.

Edmund S. Aronowitz

Edmund Aronowitz is an associate at Grant & Eisenhofer, where his primary area of practice is consumer class action litigation. Prior to joining G&E, Mr. Aronowitz was a class action litigation associate in the Chicago office of a national law firm, and practiced complex commercial litigation as an associate in the New York office of a large global firm.

Mr. Aronowitz graduated from Cornell University (B.A. with honors, History, 2002) and Cornell Law School (J.D. with honors, 2005) where he was a Managing Editor of the Cornell Journal of Law and Public Policy and a Bench Editor on the Moot Court Board. Following law school, Mr. Aronowitz served as a law clerk to the Hon. Robert L. Hinkle of the United States District Court for the Northern District of Florida. Mr. Aronowitz has been recognized in the *Illinois Super Lawyers* Rising Stars list for 2013, 2014, and 2015.

Mr. Aronowitz is admitted to practice law in New York and Illinois and before the United States District Courts for the Southern District of New York and Northern District of Illinois.

Kimberly A. Evans

Kimberly Evans is an associate at Grant & Eisenhofer, focusing her practice on appraisal rights, corporate governance and complex securities litigation on behalf of institutional investor clients.

Prior to joining Grant & Eisenhofer, Ms. Evans worked as an associate at a well-known Philadelphia-area law firm, where she gained extensive experience in the practice areas of securities, antitrust, and consumer protection class action litigation. She also previously worked as a paralegal in the Juvenile Division of the Philadelphia District Attorney's Office.

Ms. Evans is a member of the Delaware State Bar Association and has volunteered with the Wills For Heroes Program, an organization that provides free wills and advanced directives to police officers, firefighters and other first responders. She also volunteers her time with local animal rescue groups in the greater-Philadelphia area.

Ms. Evans earned her J.D. from Temple University in 2007 and received a B.A. in chemistry and criminal justice from La Salle University in 2003.

Robert D. Gerson

Robert Gerson is an associate at Grant & Eisenhofer, representing institutional investors and other plaintiffs in complex litigations including securities class actions and derivative suits.

Mr. Gerson has litigated numerous cases involving the financial crisis, including more than fifteen actions arising out of wrongdoing related to the issuance of residential mortgage-backed securities ("RMBS") and other complex financial products. He is currently a member of the litigation teams prosecuting *Fernandez et al. v. UBS AG et al.* and *In re Kinder Morgan Energy Partners, L.P. Capex Litigation*.

Robert was a member of the team in *Minneapolis Firefighters' Relief Association v. Medtronic, Inc.*, which achieved an \$85 million recovery for investors arising out of allegations that Medtronic promoted the Infuse bone graft for dangerous "off-label" uses.

Mr. Gerson is a graduate of New York Law School, where he was a member of the Moot Court Association and the University of Maryland, where he received a B.A. in government and politics.

David M. Haendler

David Haendler is an associate at Grant & Eisenhofer, practicing primarily in the areas of securities and derivative litigation. He has represented institutional investors in complex cases throughout the country, at both the trial court and appellate levels.

Mr. Haendler played a significant role in a number of securities fraud actions brought by one of the world's largest pension funds regarding its purchases of residential mortgage-backed securities. Mr. Haendler has also represented investors in class actions brought under the federal securities laws. He currently represents plaintiffs in cases including *In re JP Morgan Chase & Co. Securities Litigation*, *In re Pfizer Securities Litigation*, *In re New Oriental Education & Technology Group Securities Litigation*, and *In re Miller Energy Securities Litigation*.

Mr. Haendler represents corporations and their shareholders in derivative cases before the Delaware Court of Chancery and elsewhere. He represents plaintiffs in *In re Fannie Mae/Freddie Mac Senior Preferred Stock Purchase Agreement Class Action Litigations*, a case challenging the federal government's management of Fannie Mae and Freddie Mac in conservatorship, and *In re Kinder Morgan Energy Partners, L.P. Derivative Litigation*, a case involving the accounting practices of one of the country's leading energy master limited partnerships.

Mr. Haendler has written two novels, *The Shattergrave Knights* and *World Full of Outrage*, and was assistant legal counsel for *Resurrect Dead: The Mystery of the Toynbee Tiles*, a Sundance award-winning documentary.

Jonathan M. Kass

Jonathan Kass is an associate at Grant & Eisenhofer, focusing on commercial litigation and complex civil litigation issues concerning corporate governance and securities matters.

Before joining Grant & Eisenhofer, Mr. Kass worked for White & Case LLP handling securities fraud and corporate governance disputes for Fortune 100 corporations and hedge funds. He also ran internal investigations concerning FCPA violations on behalf of foreign sovereigns, including representing the Republic of Iraq in connection with the Oil-for-Food Program.

Mr. Kass is a *summa cum laude* graduate of Fordham University School of Law where he was awarded the Order of the Coif. He received his B.A. in government with a concentration in American institutions and public policy from Cornell University, achieving Distinction in all subjects.

Michael T. Manuel

Michael Manuel is an associate at Grant & Eisenhofer, focusing on securities and corporate governance litigation. Mr. Manuel has experience in a variety of complex commercial cases, including matters involving contract disputes, securities, commercial litigation, corporate governance, mass torts and products liability cases.

Mr. Manuel graduated *cum laude* from Harvard Law School in 2002 and received a Bachelor's degree in mathematics from Duke University in 1999.

Kyle J. McGee

Kyle McGee is an associate at Grant & Eisenhofer, focusing on complex securities litigation on behalf of institutional clients and complex commercial litigation on behalf of consumers and advocacy organizations.

Mr. McGee was heavily involved in *In re Merck & Co., Inc. Vytarin/Zetia Securities Litigation* (D.N.J.), a major securities fraud action against pharmaceutical industry titan Merck & Co., Inc. The case, which was prosecuted with a related action, *In re Schering-Plough Corp. ENHANCE Securities Litigation* (D.N.J.), resulted in a record-setting recovery for investors totaling \$688 million.

Mr. McGee also represented investors in *In re XTO Energy Shareholder Class Action Litigation* (Tarrant County, TX), an action arising out of Exxon Mobile Corp.'s \$41 billion acquisition of XTO Energy, Inc., which resulted in substantial additional disclosures to shareholders concerning the merits, process, and financing of the proposed transaction.

Mr. McGee currently represents investors in various actions brought pursuant to the federal securities laws, as well as consumers in various actions brought pursuant to federal communications laws and state consumer protection laws.

Mr. McGee earned a research degree from the University of Edinburgh in Scotland as well as a J.D. from Villanova University in 2009, both with honors. Mr. McGee studied the history and philosophy of law at Edinburgh and was honored as a Dean's Merit scholar at Villanova Law. In 2005, he graduated from the University of Scranton with a B.A. in philosophy as well as media information technology.

Caitlin M. Moyna

Caitlin M. Moyna is an associate at Grant & Eisenhofer where her practice includes litigating securities fraud and shareholder derivative claims on behalf of institutional investors. Ms. Moyna is experienced in a broad range of complex commercial litigation practice areas.

Prior to joining Grant & Eisenhofer, Ms. Moyna was a litigation associate at Cravath, Swaine & Moore LLP and Ropes and Gray, LLP, and most recently, was an associate at a boutique litigation firm specializing in representing plaintiffs in securities fraud and shareholder rights' actions.

Ms. Moyna is a *cum laude* graduate of Northwestern University School of Law where she was elected to the Order of the Coif. While at Northwestern, Ms. Moyna was on the Articles Board of the *Journal of Criminal Law and Criminology*, and she served as the legal writing tutor to the class of first year law students. Ms. Moyna received her bachelor's degree from Dartmouth College.

Rebecca A. Musarra

Rebecca Musarra is an associate at Grant & Eisenhofer, where she focuses her practice on corporate governance and complex securities litigation on behalf of institutional investors. Prior to joining G&E, Ms. Musarra worked as an appellate law clerk to the Chief Justice of the Supreme Court of the Virgin Islands in St. Thomas, Virgin Islands.

During law school, Ms. Musarra was a member of the American University Law Review and served for two years in an impact litigation clinic. She was awarded a full-tuition scholarship, was elected to the Order of the Coif, and graduated *summa cum laude*.

Ms. Musarra received her J.D. degree from American University Washington College of Law in 2009 and obtained a B.A. in international relations from the College of William and Mary in 2003. Between college and law school, Ms. Musarra served as a Peace Corps Volunteer in Chad, Central Africa.

Catherine Ó Súilleabháin

Catherine (Kate) Ó Súilleabháin is an associate at Grant & Eisenhofer, where her primary area of practice is consumer class action litigation. Prior to joining G&E, Ms. Ó Súilleabháin was an associate in the Chicago office of a large global law firm, where she practiced international commercial litigation and advised clients on a variety of matters that included product and medical-device regulation and recall. She has spoken on such topics as attorney-client privilege in international litigation, FDA regulation of medical devices, and drug and medical device recall.

Ms. Ó Súilleabháin represented an Albanian family in a successful asylum hearing and was recognized by Illinois Legal Aid Online as an Attorney of the Month (May 2009) for her work on the case.

Ms. Ó Súilleabháin received her law degree from Georgetown University Law Center (J.D., 2007), where she was a Law Fellow and a member of the Barrister's Council. She was the first recipient of the Davies-Jackson Scholarship to St. John's College, the University of Cambridge. She graduated from the University of Cambridge (B.A. and M.A., English, 1992 and 1998, respectively), and from Loyola University of Chicago (B.A., English, 1990).

She recently served on the Executive Committee of the Alliance for Women of the Chicago Bar Association and co-authored a chapter on attorney-client privilege in international litigation that was published by the American Bar Association (*Litigation Strategies and Practice*, 2014).

Raymond F. Schuenemann

Raymond Schuenemann III is an associate at Grant & Eisenhofer, where his primary area of practice is consumer class action litigation.

Upon graduating from law school, Mr. Schuenemann was an associate at Capozzi & Associates, P.C. in Harrisburg, PA where he worked on matters related to employment, real estate, tax, and healthcare law. Prior to his legal career, Mr. Schuenemann was an investment accountant in the mutual fund industry where he provided accounting services for numerous bond and equity

funds. Mr. Schuenemann was also employed as an internal auditor in both the finance and banking industries.

Mr. Schuenemann is active in his community and has spent many years as a volunteer pro-bono attorney at Mid Penn Legal Services where he defended low-income clients from debt collection actions. Additionally, Mr. Schuenemann spent four years as the Chairman of the Board of the Reading Area Water Authority and currently serves as an Executive Board Member of the Reading Redevelopment Corporation.

Mr. Schuenemann received his J.D. from Widener University School of Law in 2005 and is a 1999 graduate of West Chester University where he earned a B.S. in Finance.

Elizabeth H. Shofner

Elizabeth Shofner is an associate at Grant & Eisenhofer focusing on complex civil litigation, including false claims litigation, consumer fraud, and corporate governance matters.

Prior to joining Grant & Eisenhofer, Ms. Shofner was a litigator at Patterson Belknap Webb & Tyler LLP, where she focused on complex commercial litigation, including Medicaid and consumer fraud and mortgage-backed securities litigation. She also has experience in intellectual property and appellate work. She served for several years as a law clerk to the Hon. John M. Walker, Jr., of the Second Circuit Court of Appeals, during which time she was involved in hundreds of federal appeals involving all areas of law.

Ms. Shofner co-authored the New York section of *The 2012 50-State Survey of Privacy Law* (Media Law Resource Center; 2012), co-edited the *Task Force Report on Gender, Race, and Ethnic Bias in the Second Circuit* (1998), and co-authored the article *Similarity Ratings And Confusability Of Lipread Consonants Compared With Similarity Ratings Of Auditory And Orthographic Stimuli* (American Journal of Psychology; 1991).

Ms. Shofner received her J.D. *magna cum laude* from New York University School of Law, where she was elected to the Order of the Coif and served as an articles editor for the *New York University Law Review*. She also received an M.A. in cognitive psychology from Hunter College. She holds an undergraduate degree in English literature and psychology from Washington University in St. Louis and is a member of the New York City Bar Association.

Stephanie E. Smiertka

Stephanie Smiertka is an associate at Grant & Eisenhofer where she focuses on complex pharmaceutical and medical device litigation. Prior to joining Grant & Eisenhofer, Ms. Smiertka was an associate at a national litigation firm where she practiced civil defense litigation. Before entering private practice, Ms. Smiertka served as a judicial law clerk to five judges of the Delaware Court of Common Pleas for New Castle County, where she assisted in drafting judicial opinions for both civil and criminal matters.

Ms. Smiertka earned her J.D. from The George Washington Law School in 2012. During her time at GW, she participated in the Domestic Violence Clinic, and she continues to volunteer on behalf of domestic violence survivors in Delaware. Shortly after graduation, Ms. Smiertka wrote

an article titled “The Federal Fortress Surrounding Police Liability For Failure To Enforce Protection Orders,” published by *The Buffalo Journal of Gender, Law & Social Policy*.

Ms. Smiertka is admitted to practice in Delaware and Florida. She is an active member of the Richard S. Rodney Inn of Court and the Delaware State Bar Association’s Women and the Law section.

John E. Tangren

John Tangren is an associate at Grant & Eisenhofer, where his primary area of practice is consumer class action litigation. Prior to joining G&E, Mr. Tangren was a class action litigation associate in the Chicago office of a national law firm, and practiced complex commercial litigation as an associate in the Chicago office of a large global firm.

Mr. Tangren has spoken on issues relating to class action litigation and electronic discovery. Mr. Tangren's recent speaking engagements include "The Use of Absent Class Member Discovery on Issues of Class Certification," at the 2013 National Consumer Class Action Litigation & Management Conference; "ESI for Beginners," at the 2013 Seventh Circuit Conference of the National Employment Lawyers Association; and "Lessons on Motions to Dismiss from Other Car Defect Cases," at the HarrisMartin MDL Conference: General Motors Ignition Switch Recall Litigation.

Mr. Tangren graduated from the University of Chicago (A.B., philosophy and music, 2000) and the University of Chicago Law School with honors (J.D., 2003) where he was Executive Editor of the University of Chicago Legal Forum. He was selected to The National Trial Lawyers Top 40 Under 40 in 2012 and by *Super Lawyers* as an Illinois "Rising Star" for 2011, 2013, 2014, and 2015.

Jennifer A. Williams

Jennifer Williams, an associate at Grant & Eisenhofer, focuses on False Claims Act, antitrust, and corporate governance litigation.

Ms. Williams is the co-author of “Controlling Government Contractors: Can the False Claims Act be More Effective?,” 14 Sedona Conf. J. 1 (2013). She also co-authored “Collecting Evidence in Financial Fraud Cases: Insider Trading,” materials used, and translated into Mandarin, as a part of a training program sponsored by Emory University School of Law for prosecutors in the Shanghai, China prosecutors office.

Ms. Williams received her J.D., with honors, and Master’s in Theological Studies from Emory University School of Law and Emory University Candler School of Theology, respectively, where she was awarded the Herman Dooyeweerd Prize in Law and Religion and selected for the Order of Emory Advocates.

During law school, Ms. Williams interned with the Georgia Resource Center, the Georgia Innocence Project, the DeKalb County Public Defenders Office, and the Equal Employment Opportunity Commission – Atlanta Regional Office.

In 2006, she received a B.A. *magna cum laude* from Centre College in Danville, Kentucky, graduating Phi Beta Kappa. Ms. Williams was a Fulbright Grantee/ETA to South Korea in 2006.

Marc D. Weinberg

Marc Weinberg is a Business Development Manager at Grant & Eisenhofer where he works with the firm's institutional investor clients regarding litigation-related matters. Prior to joining Grant & Eisenhofer in 2005, Mr. Weinberg spent nearly seven years as an Assistant District Attorney in Philadelphia prosecuting violent juvenile offenders, sexual predators and drug dealers. He then spent several years trying insurance defense cases before moving to the area of securities class actions and shareholder litigation.

Mr. Weinberg frequently speaks at institutional investor conferences regarding shareholder fraud, fiduciary duty and corporate governance issues. He is also active in a variety of organizations dedicated to serving the institutional investor community.

Mr. Weinberg is a 1989 graduate of the Pennsylvania State University and earned his J.D. from the Widener University School of Law, where he was a member of the Moot Court Honor Society.

G&E also employs the following staff attorneys:

Joshua E. Alpert
Simona L. Bonifacic
Leanne P. Brown-Pasquarello
Tracy L. Campbell
James P.A. Cavanaugh
Alice Cho Lee
Kerry A. Dustin
Cheron D. Everett
R. Alexander Gartman
Lisa K. Grumbine
Lawrence P. Kempner
Edward M. Lilly
Michael A. Morris
Kevin M. Nadolny
Joseph P. Nearey
Kimberly B. Schwarz
Shannon T. Somma

Selected Institutional Client Representations

G&E has represented or is currently representing a number of institutional investors in major securities fraud actions, shareholder derivative suits, other breach-of-fiduciary-duty cases and related ancillary proceedings around the country. Some of the Firm's cases include:

(A) In Securities Fraud Litigation:

(1) CellStar

In one of the earliest cases filed after the enactment of PSLRA, the State of Wisconsin Investment Board ("SWIB") was designated lead plaintiff and G&E was appointed lead counsel in *Gluck v. CellStar Corp.*, 976 F.Supp. 542 (N.D.Tex. 1997). The cited opinion is widely considered the landmark on standards applicable to the lead plaintiff/lead counsel practice under PSLRA. (See, especially, *In re Cendant Corp. Litig.*, 2001 WL 980469, at *40, *43 (3d Cir. Aug. 28, 2001), citing the CellStar case.) After the CellStar defendants' motion to dismiss failed and a round of discovery was completed, the parties negotiated a \$14.6 million settlement, coupled with undertakings on CellStar's part for significant corporate governance changes as well. With SWIB's active lead in the case, the class recovery, gross before fees and expenses, was approximated to be 56% of the class' actual loss claims, about 4 times the historical 14% average gross recovery in securities fraud litigation. Because of the competitive process that SWIB had undertaken in the selection of counsel, resulting in a contingent fee percentage significantly less than the average 31% seen historically, the net recovery to the class after all claims were submitted came to almost 50% of actual losses, or almost 5 times the average net recovery.

(2) DaimlerChrysler

Florida State Board of Administration was appointed lead plaintiff and G&E co-lead counsel in the PSLRA class action on behalf of shareholders of the former Chrysler Corporation who exchanged their shares for stock in DaimlerChrysler in Chrysler's 1998 business combination with Daimler-Benz AG which was represented at the time as a "merger of equals." Shortly before trial, the defendants agree to a \$300 million cash settlement, among the largest securities class action settlements since the enactment of the PSLRA. *In re DaimlerChrysler Securities Litigation*, D. Del., C.A. No. 00-0993.

(3) Oxford Health Plans

Public Employees' Retirement Association of Colorado ("ColPERA") engaged G&E to represent it to seek the lead plaintiff designation in the numerous securities fraud actions that were consolidated into *In re Oxford Health Plans, Inc., Securities Litig.*, S.D.N.Y., MDL Docket No. 1222 (CLB). The court ordered the appointment of ColPERA as a co-lead plaintiff and G&E as a co-lead counsel. G&E and its co-leads filed the Consolidated Amended Complaint. Memorandum opinions and orders were entered denying defendants' motions to

dismiss (see 51 F.Supp. 2d 290 (May 28, 1999) (denying KPMG motion) and 187 F.R.D. 133 (June 8, 1999) (denying motion of Oxford and individual director defendants)). The case settled for \$300 million, another settlement negotiated by G&E that is among the largest settlements since the enactment of the PSLRA.

(4) Dollar General

The U.S. District Court for the Middle District of Tennessee ordered the appointment of Florida State Board of Administration and the Teachers' Retirement System of Louisiana as lead plaintiffs and G&E as co-lead counsel in a PSLRA and Rule 10b-5 case against the defendant company, its accountants, and individual insiders who allegedly issued false and misleading statements over an alleged 3-year Class Period and failed to disclose adverse facts about the company's financial results. Settlements were approved involving a cash payment of \$162 million from the company and the individual defendants, an additional \$10.5 million from Deloitte & Touche, LLP (Dollar General's accountants), and beneficial governance reforms for Dollar General. *In re Dollar General Securities Litigation*, M.D. Tenn., No. 3:01-0388, orders dated July 19, 2001 and September 29, 2003.

(5) Just For Feet

G&E represented the State of Wisconsin Investment Board ("SWIB") in a federal securities class action against certain officers and directors of Just For Feet, Inc., and against Just For Feet's auditors, in the Northern District of Alabama. That action arose out of the defendants' manipulation of the company's accounting practices to materially misstate the company's financial results. Having been appointed co-lead plaintiff, SWIB, with G&E as its counsel, took primary responsibility for the case. (*SWIB v. Ruttenberg, et al.*, N.D. Ala., CV 99-BU-3097-S and 99-BU-3129-S, 102 F. Supp. 2d 1280 (N.D. Ala. 2000)). SWIB obtained a policy limits settlement with the individual defendants' D&O carrier and an additional \$7.4 million from Just For Feet's auditor, for a recovery totaling approximately \$32 million.

(6) Waste Management

G&E filed a non-class federal securities action against Waste Management, Inc., its former and current directors, and the company's accountants in the Northern District of Florida, on behalf of Lens Investment Management, LLC and Ram Trust Services, Inc. The complaint alleged that Waste Management had, over a five-year period, issued financial statements and other public statements that were materially false and misleading due to the defendants' fraudulent and improper accounting manipulations. G&E also filed non-class actions in Illinois state court, asserting similar claims on behalf of the Florida State Board of Administration ("FSBA") and the Teachers' Retirement System of Louisiana. After G&E successfully defeated the defendants' motions to dismiss FSBA's complaint in state court, FSBA's cause of action was transferred to the Northern District of Florida. At the point where there were competing motions for summary judgment

pending, G&E successfully negotiated a settlement pursuant to which each plaintiff received several times what it would have received in the class action. *Florida State Board of Administration, Ram Trust Services, Inc. and Lens Investment Management, LLC v. Waste Management, Inc., et al.*, N.D.Fla., No. 4:99CV66-WS, amended complaint filed June 21, 1999; and *Teachers' Retirement System of Louisiana v. Waste Management, Inc., et al.*, Circuit Ct., Cook Co. [Ill.], No. 98 L 06034, complaint filed May 18, 1999.

(7) **Total Renal Care**

In June 1999, the Louisiana State Employees' Retirement System and Teachers' Retirement System of Louisiana were appointed as Lead Plaintiffs in a federal securities class action against Total Renal Care ("TRC") and certain of its officers and directors, in the U.S. District Court for the Central District of California. G&E served as Plaintiffs' Lead Counsel. Plaintiffs filed their Corrected Consolidated Amended Complaint against the defendants, alleging, *inter alia*, that the defendants manipulated TRC's financial statements so as to materially overstate TRC's revenues, income and assets and to artificially inflate TRC's stock price. G&E negotiated a settlement requiring TRC's payment of \$25 million into a settlement fund for the class and the company's adoption of certain internal corporate governance policies and procedures designed to promote the future accountability of TRC's management to its stockholders. At the time of the settlement, this amount represented 33% of the value of the Company's shares. *In re Total Renal Care Securities Litigation*, C.D. Cal., Master File No. CV-99-01745 CBM.

(8) **Safety-Kleen**

G&E was sole lead counsel for the plaintiffs in a federal securities class action and a series of related individual actions against former officers, directors, auditors and underwriters of Safety-Kleen Corporation, who are alleged to have made false and misleading statements in connection with the sale and issuance of Safety-Kleen bonds. *In re Safety-Kleen Corp. Bondholders Litig.*, D.S.C., No. 3:00-CV-1145-17, consolidated complaint filed January 23, 2001. In March of 2005, after a jury had been selected for trial, the auditor defendant settled with the class and individual claimants for \$48 million. The trial then proceeded against the director and officer defendants. After seven weeks of trial, the director defendants settled for \$36 million, and the court entered judgment as a matter of law in favor of the class and against the company's CEO and CFO, awarding damages of \$192 million.

(9) **Styling Technology Corporation**

G&E represented funds managed by Conseco Capital Management, Inc., Credit Suisse Asset Management, Pilgrim American Funds and Oppenheimer Funds, Inc. in a securities action brought in May 2001, asserting both federal (1933 Act) and state claims brought in the Superior Court of California. The suit alleged that

certain former officers, as well as the independent auditors, of Styling Technology Corporation made false and misleading statements in connection with the sale and issuance of Styling Technology bonds. Styling Technology filed for bankruptcy protection under Chapter 11 in August 1999. In October 2000, discovery of accounting irregularities and improperly recognized revenue forced the Company to restate its financial statements for the years 1997 and 1998. Plaintiffs, owning \$66.5 million of the total \$100 million in bonds sold in the offering, settled the case for a recovery representing approximately 46% of the losses suffered by the client funds that they manage. *Franklin High Income Trust, et al. v. Richard R. Ross, et al.*, Cal. Super., San Mateo Co. [Calif.], Case No: 415057, complaint filed November 28, 2000.

(10) Tyco

G&E served as co-lead counsel representing co-lead plaintiffs Teachers' Retirement System of Louisiana and Louisiana State Employees' Retirement System in a securities class action against Tyco International Ltd. and PricewaterhouseCoopers LLP. The complaint alleged that the defendants, including Tyco International, Dennis Kozlowski, and other former executives and directors of Tyco and PricewaterhouseCoopers, made false and misleading public statements and omitted material information about Tyco's finances in violation of Sections 10(b), 14, 20A and 20(a) of the Securities Exchange Act of 1934. Tyco agreed to fund \$2.975 billion in cash to settle these claims, representing the single largest payment from any corporate defendant in the history of securities class action litigation. PricewaterhouseCoopers also agreed to pay \$225 million to settle these claims, resulting in a total settlement fund in excess of \$3.2 billion.

(11) Global Crossing

Ohio Public Employees' Retirement System and the Ohio Teachers' Retirement System were appointed lead plaintiff and G&E was appointed sole lead counsel in a securities class action against Global Crossing, Ltd. and Asia Global Crossing, Ltd. *In re Global Crossing, Ltd. Securities & "ERISA" Litig.*, MDL Docket No. 1472. In November 2004, the Court approved a partial settlement with the Company's former officers and directors, and former outside counsel, valued at approximately \$245 million. In July 2005, the Court approved a \$75 million settlement with the Citigroup-related defendants (Salomon Smith Barney and Jack Grubman). In October 2005, the Court approved a settlement with Arthur Andersen LLP and all Andersen-related defendants for \$25 million. In October 2006, the Court approved a \$99 million settlement with various financial institutions. In total, G&E recovered \$448 million for investors in Global Crossing.

(12) Telxon Corporation

G&E filed a federal securities and common law action against Telxon Corporation, its former officers and directors and its accountants in the Northern District of Ohio on behalf of Wyser-Pratte Management Co., Inc., an investment

management firm. Following mediation, G&E negotiated a settlement of all claims. *Wyser-Pratte Management Co., Inc. v. Telxon Corp., et al.*, N.D. Ohio, Case No. 5:02CV1105.

(13) Hayes Lemmerz

G&E served as lead counsel to plaintiffs and class members who purchased or acquired over \$1 billion in bonds issued by Hayes Lemmerz International, Inc. G&E negotiated a settlement worth \$51 million. *Pacholder High Yield Fund, Inc. et al. v. Ranko Cucoz et al.*, E.D. Mich., C.A. No. 02-71778.

(14) Asia Pulp and Paper

On behalf of bondholders of various subsidiaries of Indonesian paper-making giant Asia Pulp and Paper (“APP”), G&E filed an action alleging that the bondholders were defrauded by APP’s financial statements which were inflated by nearly \$1 billion in fictitious sales. Defendants’ motions to dismiss were denied. *Franklin High Income Trust, et al. v. APP Global Ltd., et al.*, N.Y. Sup. Ct., Trial Div., Index No. 02-602567. The matter was resolved through a confidential settlement.

(15) Alstom

Louisiana State Employees’ Retirement System was appointed as co-lead plaintiff and G&E was appointed co-lead counsel in a class action against Alstom SA, a French corporation engaged in power generation, transmission and distribution in France. The suit alleges that Alstom and other defendants made false and misleading statements concerning the growth and financial performance of its transportation subsidiary. G&E achieved a settlement in the amount of \$6.95 million. *In re Alstom SA Sec. Litig.*, S.D.N.Y. 03-cv-6595.

(16) Parmalat

G&E was co-lead counsel in this securities class action arising out of a multi-billion dollar fraud at Parmalat, which the SEC described as “one of the largest and most brazen corporate financial frauds in history.” Settlements exceeding \$110 million were reached. *In re Parmalat Sec. Litig.*, S.D.N.Y. 04-MDL-1653.

(17) Marsh & McLennan

G&E was co-lead counsel for the class of former Marsh & McLennan shareholders in this federal securities class action alleging that the company, its officers, directors, auditors, and underwriters participated in a fraudulent scheme involving, among other things, bid-rigging and secret agreements to steer business to certain insurance companies in exchange for “kick-back” commissions. After five years of litigation, G&E achieved a \$400 million settlement on behalf of the class. *In re Marsh & McLennan Companies, Inc. Sec. Litig.*, S.D.N.Y. 04-cv-8144.

(18) Hollinger International

G&E was co-lead counsel in this securities class action arising out of a company scandal at Hollinger International, Inc. which involves payment of millions of dollars to certain executives, including the company's former CEO, Lord Conrad Black, relating to sales of company assets. G&E negotiated a settlement with Hollinger in the amount of \$37.5 million. *In re Hollinger International Inc. Securities Litigation*, N.D. Ill. 04-C-0834.

(19) General Motors

G&E served as co-lead counsel in a securities class action against GM, arising from alleged false statements in GM's financial reports. After about two and a half years of litigation, a settlement was reached with GM for \$277 million, with GM's auditor, Deloitte & Touche contributing an additional \$26 million. The combined \$303 million settlement ranked among the largest shareholder recoveries of 2008. *In re General Motors Corp. Sec. Litig.*, E.D. Mich., MDL No. 1749.

(20) Delphi

Delphi is an automotive company that was spun off of General Motors. The company failed as a stand-alone entity, but concealed its failure from investors. G&E's client, one of the largest pension funds in the world, served as a lead plaintiff, and G&E served as co-lead counsel in this securities class action, which produced settlements totaling \$325 million from Delphi, its auditor and its director and officers liability insurer. *In re Delphi Corporation Securities Derivative & ERISA Litigation*, E.D. Mich., MDL No. 1725.

(21) Refco

A mere two months after going public, Refco admitted that its financials were unreliable because the company had concealed that hundreds of millions of dollars of uncollectible receivables were owed to the company by an off-balance sheet entity owned by the company's CEO. G&E served as a co-lead counsel and G&E's client, PIMCO, was a co-lead plaintiff. The case resulted in recoveries totaling \$422 million for investors in Refco's stock and bonds (including \$140 million from the company's private equity sponsor, over \$50 million from the underwriters, and \$25 million from the auditor). *In re Refco, Inc. Securities Litigation*, S.D.N.Y., No. 05 Civ. 8626.

(22) Sprint

G&E represented lead plaintiff institutional investor Carlson Capital, L.P. in this class action suit against Sprint Corporation and its former CEO and directors for breach of fiduciary duty in the consolidation of two separate tracking stocks. In

December 2007, a \$57.5 million settlement was approved. *In re Sprint Corporation Shareholder Litigation*, D. Kan., No. 04 CV 01714.

(B) In Derivative and Other Corporate Litigation:

(1) Digex

This case resulted in a settlement of over \$400 million, the largest reported settlement in the history of Delaware corporate litigation. G&E represented the lead plaintiff, TCW Technology Limited Partnership, in alleging that Digex, Inc.'s directors and majority stockholder (Intermedia, Inc.) breached their fiduciary duties in connection with WorldCom's proposed \$6 billion acquisition of Intermedia. Among other issues, WorldCom was charged with attempting to usurp a corporate opportunity that belonged to Digex and improperly waiving on Digex's behalf the protections of Delaware's business combination statute. Following G&E's argument on a motion to preliminarily enjoin the merger, the Court issued an opinion declining to enjoin the transaction but acknowledging plaintiffs' likelihood of success on the merits. *In re Digex, Inc. Shareholders Litigation*, C.A. No. 18336, 2000 WL 1847679 (Del. Ch. Dec. 13, 2000). The case settled soon thereafter.

(2) UnitedHealth Group

G&E represented the Ohio Public Employees Retirement System, State Teachers Retirement System of Ohio, and Connecticut Retirement Plans and Trust Funds as lead plaintiffs in a derivative and class action suit in which G&E successfully challenged \$1.2 billion in back-dated options granted to William McGuire, then-CEO of health care provider UnitedHealth Group. This was among the first – and most egregious – examples of options backdating. G&E's case produced a settlement of \$922 million, the largest settlement in the history of derivative litigation in any jurisdiction. *In re UnitedHealth Group Inc. Shareholder Derivative Litig.*, C.A. No. 06-cv-1216 (D. Minn.)

(3) AIG

In what was, at the time, the largest settlement of derivative shareholder litigation in the history of the Delaware Chancery Court, G&E reached a \$115 million settlement in a suit against former executives of AIG for breach of fiduciary duty. The case challenged hundreds of millions of dollars in commissions paid by AIG to C.V. Starr & Co., a privately held affiliate controlled by former AIG Chairman Maurice "Hank" Greenberg and other AIG directors. The suit alleged that AIG could have done the work for which it paid Starr, and that the commissions were simply a mechanism for Greenberg and other Starr directors to line their pockets. *Teachers' Retirement System of Louisiana v. Greenberg, et al.*, C. A. No. 20106-VCS (Del. Ch.).

(4) Genentech

When Swiss healthcare company Roche offered to buy out biotech leader Genentech Inc. for \$43.7 billion, or \$89 per share, G&E filed a derivative claim on behalf of institutional investors opposed to the buyout. With the pressure of the pending litigation, G&E was able to reach a settlement that provided for Roche to pay \$95 per share, representing an increase of approximately \$3 billion for minority shareholders. *In re Genentech, Inc. Shareholders Litig.*, C.A. No. 3911-VCS (Del. Ch.).

(5) Willamette

In January 2002, at the request of Wyser-Pratte Management Co., Inc. and others, G&E filed a shareholder derivative action in Oregon state court claiming that the board of Willamette Industries, Inc. breached its fiduciary duties by attempting to cause Willamette to acquire the asbestos-ridden building products division of Georgia-Pacific Company as part of a scorched-earth effort to defeat a hostile takeover of Willamette by its chief competitor, Weyerhaeuser Company. G&E obtained an expedited hearing on its motion for a preliminary injunction and obtained an agreement from Willamette at the hearing not to consummate any deal with Georgia-Pacific without providing prior notice to G&E. Almost immediately thereafter, and after years of fighting against Weyerhaeuser's takeover attempts, the Willamette board relented and agreed to sell the company to Weyerhaeuser. *Wyser-Pratte Management Co., Inc. & Franklin Mutual Advisors v. Swindells, et al.*, No. 0201-0085 (Ore. Cir. Ct.).

(6) Medco Research

In January 2000, G&E filed a shareholder derivative action on behalf of State of Wisconsin Investment Board against the directors of Medco Research, Inc. in Delaware Chancery Court. The suit alleged breach of fiduciary duty in connection with the directors' approval of a proposed merger between Medco and King Pharmaceuticals, Inc. G&E was successful in obtaining a preliminary injunction requiring Medco to make supplemental and corrective disclosures. Because of G&E's efforts, the consideration to Medco's stockholders increased by \$4.08 per share, or \$48,061,755 on a class-wide basis. *State of Wisconsin Investment Board v. Bartlett, et al.*, C.A. No. 17727, 2000 WL 193115 (Del. Ch. Feb. 9, 2000).

(7) Occidental Petroleum

G&E represented Teachers' Retirement System of Louisiana and served as co-counsel in a shareholders' derivative suit against the directors of Occidental Petroleum Corporation, challenging as corporate waste the company's excessive compensation arrangements with its top executives. Filed in California state court, the case settled when the company agreed to adopt California Public Employees' Retirement System's model principles of corporate governance and undertook to reconstitute its key

committees so as to meet the tests of independence under those principles. *Teachers' Retirement System of Louisiana v. Irani et al.*, No. BC1850009 (Cal. Super.).

(8) Staples, Inc.

On behalf of Teachers' Retirement System of Louisiana, G&E challenged Staples, Inc.'s proposed "recapitalization" plan to unwind a tracking stock, Staples.com, which it created in 1998. G&E obtained a preliminary injunction against the deal and the deal terms were ultimately altered resulting in a \$15-\$20 million gain for shareholders. Additional disclosures were also required so that shareholders voted on the challenged transaction based on a new proxy statement with substantial additional disclosures. *In re Staples, Inc. Shareholders Litigation*, C.A. No. 18784, 2001 WL 640377 (Del. Ch. June 5, 2001).

(9) SFX/Clear Channel Merger

G&E filed a class action on behalf of stockholders of SFX, challenging the merger between SFX and Clear Channel. While the SFX charter required that in any acquisition of SFX all classes of common stockholders be treated equally, the merger, as planned, provided for approximately \$68 million more in consideration to the two Class B stockholders (who happened to be the senior executives of SFX) than to the public stockholders. The merger was structured so that stockholders who voted for the merger also had to vote to amend the Charter to remove the non-discrimination provisions as a condition to the merger. G&E negotiated a settlement whereby \$34.5 million more was paid to the public stockholders upon closing of the merger. This was more than half the damages alleged in the Complaint. *Franklin Advisers, Inc., et al. v. Sillerman, et al.*, C.A. No. 17878 (Del. Ch.).

(10) Lone Star Steakhouse & Saloon

G&E filed a derivative lawsuit on behalf of California Public Employees' Retirement System ("CALPERS") against Lone Star's former CEO, Jamie Coulter, and six other Lone Star directors. The suit alleged that the defendants violated their fiduciary duties in connection with their approval of the company's acquisition of CEI, one of Lone Star's service providers, from Coulter, as well as their approvals of certain employment and compensation arrangements and option repricing programs. Before filing the suit, G&E had assisted in CALPERS in filing a demand for books and records pursuant to Section 220 of the Delaware General Corporation Law. The company's response to that demand revealed the absence of any documentation that the board ever scrutinized transactions between Lone Star and CEI, that the board negotiated the purchase price for CEI, or that the board analyzed or discussed the repricing programs. In August 2005, the Court approved a settlement negotiated by G&E whereby Lone Star agreed to a repricing of options granted to certain of its officers and directors, payments from certain of the officers and directors related to option grants, and a \$3 million payment from Lone Star's director and officer insurance policy. Lone Star further

acknowledged that the lawsuit was one of the significant factors considered in its adoption of certain corporate governance reforms. *California Public Employees' Retirement System v. Coulter, et al.*, C.A. No. 19191 (Del. Ch.).

(11) **Siebel**

The issue of excessive executive compensation has been of significant concern for investors, yet their concerns have remained largely unaddressed due to the wide discretion afforded corporate boards in establishing management's compensation. G&E effected a sea change in the compensation policies of Siebel Systems, a leading Silicon Valley-based software developer long considered to be an egregious example of executive compensation run amok, and caused Thomas Siebel, the company's founder and CEO, to cancel 26 million options with a potential value of \$54 million. Since the company's founding in 1996, Siebel Systems had paid Mr. Siebel nearly \$1 billion in compensation, largely in the form of lavish stock options that violated the shareholder-approved stock option plan. In addition, the company had paid its directors millions of dollars for their service on the board, also in the form of stock options, at levels exponentially higher than that paid to directors on the boards of similar companies. G&E, on behalf of Teachers' Retirement System of Louisiana, commenced a derivative action challenging the company's compensation practices in September of 2002 even though a prior, similar lawsuit had been dismissed. Following a hard-fought and acrimonious litigation, G&E successfully negotiated a settlement that, in addition to the options cancellation, included numerous corporate governance reforms. The company agreed to, *inter alia*, restructure its compensation committee, disclose more information regarding its compensation policies and decisions, cause its outside auditor to audit its option plans as part of the company's annual audit, and limit the compensation that can be paid to directors. The Siebel Systems settlement generated considerable favorable press in the industry, as investors and compensation experts anticipated that the reforms adopted by Siebel Systems could affect how other companies deal with compensation issues. *Teachers' Retirement System of Louisiana v. Thomas M. Siebel, et al.*, C. A. No. 425796 (Cal. Super.).

(12) **HealthSouth Corporation**

G&E filed a derivative and class action lawsuit on behalf of Teachers' Retirement System of Louisiana against HealthSouth Corporation, its auditors, certain individual defendants, and certain third parties seeking, *inter alia*, an order forcing the HealthSouth board of directors to hold an annual shareholder meeting for the purpose of electing directors, as no such meeting had been held for over thirteen months. Following a trial, G&E negotiated a settlement of part of its claims, pursuant to which five of the defendant directors who were alleged to have engaged in improper self-dealing with the company agreed to resign and be replaced by directors selected by a committee comprised in part by institutional investors of HealthSouth. *Teachers' Retirement System of Louisiana v. Scrushy*, Del. Ch., C.A. No. 20529 (March 2, 2004).

(13) NYSE/Archipelago

G&E served as co-lead counsel in a class action in New York state court, brought on behalf of a class of seat holders of the New York Stock Exchange (“NYSE”) challenging the proposed merger between the NYSE and Archipelago Holdings, LLC. The complaint alleged that the terms of the proposed merger were unfair to the NYSE seat holders, and that by approving the proposed merger, the NYSE board of directors had violated their fiduciary duties of care, loyalty and candor, because the transaction was the result of a process that was tainted by conflicts of interest and the directors failed adequately to inform themselves of the relevant facts. The court denied the defendants’ motion to dismiss, and after expedited discovery, including over 30 depositions in a five week period, a preliminary injunction evidentiary hearing was held, in which plaintiffs sought to postpone the vote on the merger until a new, current fairness opinion was obtained from an independent financial advisor. On the second day of the hearing, the defendants agreed to the relief being sought, namely that they would obtain a new, current fairness opinion from an independent financial advisor. *In re New York Stock Exchange/Archipelago Merger Litig.*, No. 601646/05 (Sup. Ct. N.Y. Co.)

(14) Caremark / CVS

G&E represented institutional shareholders in this derivative litigation challenging the conduct of the board of directors of Caremark Rx Inc. in connection with the negotiation and execution of a merger agreement with CVS, Inc., as well as that board’s decision to reject a competing proposal from a different suitor. Ultimately, through the litigation, G&E was able to force Caremark’s board not only to provide substantial additional disclosures to the public shareholders, but also to renegotiate the terms of the merger agreement with CVS to provide Caremark shareholders with an additional \$3.19 billion in cash consideration and to ensure Caremark’s shareholders had statutory appraisal rights in the deal. *Louisiana Municipal Police Employees’ Retirement System, et al. v. Crawford, et al.*, C.A. No. 2635-N (Del. Ch.).

(15) AIG

G&E achieved a settlement of derivative claims against former American International Group, Inc. (“AIG”) CEO Hank Greenberg and other officers of the insurer in connection with a well-documented bid-rigging scheme used to inflate the company’s income. The scheme — which included an array of wrongful activities, such as sham insurance transactions intended to deceive shareholders and illegal contingent commissions which amounted to kickbacks to obtain business — caused billions of dollars’ worth of damage to AIG, and ultimately led to the restatement of years of financial statements.

In approving a settlement that returned \$90 million to AIG, the Court said the settlement was “an incentive for real litigation” with “a lot of high-quality lawyering.” *In re American International Group, Inc., Consolidated Derivative Litigation*. Delaware Chancery Court, 769-VCS

(16) Del Monte Foods

G&E served as lead counsel in shareholder litigation in which the Firm obtained an \$89.4 million settlement against Del Monte Foods Co. and Barclays Capital. On February 14, 2011, the Delaware Chancery Court issued a ground-breaking order enjoining not only the shareholder vote on the merger, but the merger agreement's termination fee and other mechanisms designed to deter competing bids. As a result of plaintiff's efforts, the Board was forced to conduct a further shopping process for the company. Moreover, the opinion issued in connection with the injunction has resulted in a complete change on Wall Street regarding investment banker conflicts of interests and company retention of investment bankers in such circumstances. *In re Del Monte Shareholder Litigation*, C.A. No. 6027-VCL (Del. Ch).

(C) In Securities Class Action Opt-Out Litigation**(1) AOL Time Warner, Inc.**

G&E filed an opt-out action against AOL Time Warner, its officers and directors, auditors, investment bankers and business partners. The case challenged certain transactions entered by the company to improperly boost AOL Time Warner's financials. G&E was able to recover for its clients more than 6 times the amount that they would have received in the class case.

(2) BankAmerica Corp.

G&E filed an individual action seeking to recover damages caused by the defendants' failure to disclose material information in connection with the September 30, 1998 merger of NationsBank Corporation and BankAmerica Corporation. G&E was preparing the case for trial when it achieved a settlement whereby the firm's client received more than 5 times what it would have received in the related class action. Those proceeds were also received approximately one year earlier than the proceeds from the class action settlement.

(3) Bristol-Myers Squibb

G&E filed an opt-out action against Bristol-Myers Squibb, certain of its officers and directors, its auditor, and Imclone, Inc., alleging that Bristol-Myers had falsified billions of dollars of revenue as part of a scheme of earnings management. While the federal class action was dismissed and eventually settled for only 3 cents on the dollar, G&E's action resulted in a total settlement representing approximately 10 times what the firm's clients likely would have received from the class action.

(4) **Qwest Communications**

G&E filed an individual action against Qwest, its accountant (Arthur Andersen LLP), Solomon Smith Barney, and current and former officers and directors of those companies. The case alleged that Qwest used “swap deals” to book fake revenue and defraud investors. G&E was able to recover for its clients more than 10 times what they would have recovered had they remained members of the class.

(5) **WorldCom**

G&E filed an opt-out action against former senior officers and directors of WorldCom, including former CEO Bernard Ebbers, and Arthur Andersen LLP (WorldCom’s former auditor), among others. The case stemmed from the widely-publicized WorldCom securities fraud scandal that involved false and misleading statements made by the defendants concerning WorldCom’s financials, prospects and business operations. G&E recovered for its clients more than 6 times what they would have received from the class action.

EXHIBIT O

Firm Resume of GARDY & NOTIS, LLP

Gardy & Notis, LLP, with offices in New York City and Englewood Cliffs, New Jersey, specializes in large, complex litigation in the fields of securities, corporate governance, and mergers and acquisitions. The attorneys at Gardy & Notis, LLP have served as a plaintiffs' lead counsel in some of the largest securities fraud class action recoveries, *In re BankAmerica Corp. Securities Litigation* (\$490 million recovery), *In re Adelphia Communications Corporation Securities and Derivative Litigation* (\$455 million recovery) and *In re Waste Management Inc., Securities Litigation* (\$220 million recovery), and the firm as plaintiffs' lead counsel recently obtained a \$930 million settlement in *In re UnitedHealth Group Incorporated Derivative Litigation*.

Gardy & Notis, LLP prides itself on the aggressive pursuit of its clients' goals and on the excellence of its work. The firm fights to achieve the very best possible result for our clients no matter how difficult the obstacles or well financed the opposition. Among the more prominent of the securities fraud class actions litigated by the firm's attorneys are:

- *In re BankAmerica Corp. Securities Litigation*, (E.D. Mo.) (\$490 million recovery);
- *In re Adelphia Communications Corporation Securities and Derivative Litigation*, (S.D.N.Y.) (\$455 million recovery);
- *In re Waste Management, Inc. Securities Litigation*, (N.D. Ill.) (\$220 million recovery);
- *Hirsch v. PSS World Medical, Inc.*, (M.D. Fl.) (\$16.5 million recovery);
- *Cheney v. Cyberguard Corp.*, (S.D. Fla.) (\$10 million recovery); and
- *In re Adaptive Broadband Securities Litigation*, (N.D. Cal) (\$8.2125 million recovery).

The attorneys at Gardy & Notis, LLP also have extensive experience in litigating corporate governance, derivative, and M&A transactional cases. Our reputation for excellence and creativity in the area of director liability for breach of fiduciary duty and corporate governance are demonstrated by cases such as:

- *In re UnitedHealth Group Incorporated Derivative Litigation*, (Minnesota District Court, Hennepin County) (\$930 million recovery in stock options backdating case);
- *FIC, L.P. v. Bear Stearns Asset Management Inc.*, (S.D.N.Y.) (\$18.148 million recovery for hedge fund investors);
- *In re Orchard Enterprises, Stockholder Litigation*, (Delaware Court of Chancery) (\$10.75 million recovery to stockholders, representing a 95% increase over the price accepted by the board of directors);
- *In re The Student Loan Corporation Litigation*, (Delaware Court of Chancery) (\$10 million recovery to stockholders, representing an 8.3% increase over the price accepted by the board of directors);
- *Kahn v. Buttner (Value Line, Inc. Derivative Litigation)*, (New York State Supreme Court, New York County) (\$2.9 million recovery to public minority stockholders, representing 85% of maximum potential damages, and a 20% increase over the common stock market price);
- *In re Aramark Corporation Shareholders Litigation*, (Delaware Court of Chancery) (\$222 million increase in purchase price and management voting control reduced from 37% to 3.5%);
- *Rice v. Lafarge North America Inc.*, (Circuit Court for Montgomery County (Business and Technology Court), Maryland) (\$353 million increase in purchase price);
- *Lang v. The Reader's Digest Association, Inc.*, (Delaware Court of Chancery) (\$21 million increase to stockholders in recapitalization);
- *In re Travelers Property Casualty Corp. Securities Litigation*, (Delaware Court of Chancery) (\$25.7 million increase in purchase price above that achieved by the board of directors); and
- *In re SFX Entertainment Inc. Securities Litigation*, (Delaware Court of Chancery) (\$34.5 million increase in purchase price).

The attorneys at Gardy & Notis, LLP have decades of litigation experience and are committed to litigating with the highest level of excellence and integrity and to protecting victims of corporate wrongdoing:

MARK C. GARDY

Mr. Gardy received his B.A. from Rutgers University in 1981 where he graduated Phi Beta Kappa, with high honors. He received his J.D. *cum laude*, from New York Law School in 1984. Mr. Gardy is admitted to the Bar of the State of New York, the State of New Jersey and the United States District Courts for the Southern and Eastern Districts of New York and the District of New Jersey.

Mr. Gardy has served on panels for the Council of Institutional Investors and on a panel on D&O Liability Insurance for the American Conference Institute. He has been featured on CNBC's *Squawk Box* and in *The New York Times*. Mr. Gardy was also listed as a New Jersey Super Lawyer in 2008, 2009, 2010, 2011 and 2012.

Prior to forming Gardy & Notis, LLP, Mr. Gardy was a named partner in the law firm Abbey Gardy, LLP.

JAMES S. NOTIS

Mr. Notis received his B.A. from Brandeis University in 1991, and his J.D. from Benjamin N. Cardozo School of Law in 1994. Mr. Notis is admitted to the Bar of the State of New York, the State of New Jersey, the United States District Courts for the Southern and Eastern Districts of New York and the District of New Jersey, and the United States Court of Appeals for the Second Circuit.

Mr. Notis has served as a panelist for the Practicing Law Institute for Securities Litigation and Enforcement.

Prior to forming Gardy & Notis, LLP, Mr. Notis was a partner in the law firm Abbey Gardy, LLP.

JENNIFER SARNELLI

Ms. Sarnelli received her B.A. from The American University in 1996, and her J.D. from Seton Hall University School of Law in 2002, where she was a comments editor for the *Seton Hall Law Review*. Ms. Sarnelli is admitted to the Bars of the State of New York, the State of New Jersey, the State of California, the District of Columbia, the United States District Courts for the Southern District of New York, District of New Jersey and the Northern District of California, and the United States Court of Appeals for the Ninth Circuit.

Ms. Sarnelli is an accomplished litigator of numerous securities, antitrust and consumer class actions, and was listed as a New Jersey Super Lawyer: Rising Star in 2009, 2010, 2011 and 2012. Prior to joining Gardy & Notis, LLP, Ms. Sarnelli worked at two prominent New Jersey law firms where she litigated class action cases on behalf of plaintiffs. She also worked for a class action notice expert where she specialized in developing plain language notices designed to better inform class members about their legal rights. Ms. Sarnelli has also worked for the New Jersey General Assembly, Democratic Office and served as an intern in the Office of the First Lady.

MEAGAN A. FARMER

Ms. Farmer received her B.A. from Eastern Illinois University in 1993, and her J.D., *cum laude*, from New York Law School in 2003, where she served as Editor-in-Chief of the *New York Law School Law Review*. Ms. Farmer is admitted to the Bar of the State of New York and the United States District Courts for the Southern and Eastern Districts of New York.

ORIN KURTZ

Mr. Kurtz received his B.S. from the State University of New York, New Paltz, in 1998 and his J.D., *magna cum laude*, from New York Law School in 2004. During law school, Mr. Kurtz served as an Executive Articles Editor on the *New York Law School Law Review*. Mr. Kurtz is admitted to the Bar of the State of New York, the United States District Court for the Southern District of New York, the United States Court of Appeals for the Second Circuit, the United States Court of Appeals for the Third Circuit, and the Supreme Court of the United States. Mr. Kurtz was an author of the American Bar Association 2013 Review of Consumer Protection Law Developments (New York State section), and the American Bar Association 2010 Review of Consumer Protection Law Developments.

JAMES H. GIANNINOTO

Mr. Gianninoto received his B.A. from Bard College in 1974, and his J.D., *cum laude*, from New York Law School in 1984. During law school, Mr. Gianninoto served as Executive Editor of the *New York Law School Journal of International and Comparative Law*. Mr. Gianninoto is admitted to the Bar of the State of New York, the State of New Jersey, the State of Connecticut, and the United States District Courts for the Southern and Eastern Districts of New York, the District of New Jersey, the District of Connecticut, and the United States Court of Appeals for the Third Circuit.

EXHIBIT P



www.bursor.com

888 SEVENTH AVENUE
NEW YORK, NY 10019

1990 NORTH CALIFORNIA BLVD.
WALNUT CREEK, CA 94596

FIRM RESUME

With offices in New York and California, BURSOR & FISHER lawyers have represented both plaintiffs and defendants in state and federal courts throughout the country, primarily in the fields of telecommunications, pharmaceuticals, and dietary supplements.

The lawyers at our firm have an active civil trial practice, having won multi-million dollar verdicts or recoveries in five of five civil jury trials since 2008. Our most recent trial victory came in August 2013 in *Ayyad v. Sprint Spectrum L.P.*, in which Mr. Bursor served as lead trial counsel and won a jury verdict defeating Sprint's \$1.06 billion counterclaim and securing the class's recovery of more than \$275 million in cash and debt relief.

In *Thomas v. Global Vision Products, Inc. (II)*, we obtained a \$50 million jury verdict in favor of a certified class of 150,000 purchasers of the Avacor Hair Regrowth System. The legal trade publication VerdictSearch reported that this was the second largest jury verdict in California in 2009, and the largest in any class action.

The lawyers at our firm have an active class action practice and have won numerous appointments as class counsel to represent millions of class members, including customers of Verizon Wireless, AT&T Wireless, Cingular Wireless, Sprint, T-Mobile, General Electric, Haier America, and Michaels Stores as well as purchasers of Avacor™, Xenadrine™, and Sensa™ products. In 2014, our lawyers certified two nationwide consumer classes of consumers pursuant to contested class certification motions (*see Ebin and Forcellati, infra*). Since December 2010, Bursor & Fisher lawyers have been court-appointed Class Counsel or Interim Class Counsel in:

- i. *O'Brien v. LG Electronics USA, Inc.* (D.N.J. Dec. 16, 2010) to represent a certified nationwide class of purchasers of LG French-door refrigerators,
- ii. *Ramundo v. Michaels Stores, Inc.* (N.D. Ill. June 8, 2011) to represent a certified nationwide class of consumers who made in-store purchases at Michaels Stores using a debit or credit card and had their private financial information stolen as a result,
- iii. *In re Haier Freezer Consumer Litigation* (N.D. Cal. Aug. 17, 2011) to represent a certified class of purchasers of mislabeled freezers from Haier America Trading, LLC,
- iv. *Loreto v. Coast Cutlery Co.* (D.N.J. Sep. 8, 2011) to represent a certified nationwide class of purchasers of knives or tools made by Coast Cutlery,
- v. *Rodriguez v. CitiMortgage, Inc.* (S.D.N.Y. Nov. 14, 2011) to represent a certified nationwide class of military personnel against CitiMortgage for illegal foreclosures,

- vi. *Avram v. Samsung Electronics America, Inc., et al.* (D.N.J. Jan. 3, 2012), to represent a proposed nationwide class of purchasers of mislabeled refrigerators from Samsung Electronics America, Inc. and Lowe's Companies, Inc.,
- vii. *Rossi v. The Procter & Gamble Co.* (D.N.J. Jan. 31, 2012), to represent a certified nationwide class of purchasers of Crest Sensitivity Treatment & Protection toothpaste,
- viii. *Dzielak v. Whirlpool Corp. et al.* (D.N.J. Feb. 21, 2012), to represent a proposed nationwide class of purchasers of mislabeled Maytag Centennial washing machines from Whirlpool Corp., Sears, and other retailers,
- ix. *In re Sensa Weight Loss Litig.* (N.D. Cal. Mar. 2, 2012), to represent a certified nationwide class of purchasers of Sensa weight loss products,
- x. *Dei Rossi v. Whirlpool Corp. et al.* (E.D. Cal. Apr. 19, 2012), to represent a proposed nationwide class of purchasers of mislabeled KitchenAid refrigerators from Whirlpool Corp., Best Buy, and other retailers,
- xi. *In re Scotts EZ Seed Litig.* (S.D.N.Y. Sept. 19, 2012), to represent a proposed nationwide class of purchasers of Scotts Turf Builder EZ Seed,
- xii. *In re Sinus Buster Products Consumer Litig.* (E.D.N.Y. Dec. 17, 2012) to represent a certified nationwide class of purchasers of Sinus Buster products,
- xiii. *Scott v. JPMorgan Chase & Co., et al.* (S.D.N.Y. May 30, 2013) to represent a proposed nationwide class of Chase customers who were allegedly unilaterally enrolled into Chase's Overdraft Protection service and charged unauthorized fees,
- xiv. *Podobedov v. Living Essentials, LLC*, (C.D. Cal. Nov. 8, 2013) to represent a proposed nationwide class of purchasers of 5-hour Energy products,
- xv. *Ebin v. Kangadis Food Inc.*, (S.D.N.Y. Feb. 25, 2014) to represent a certified nationwide class of purchasers of Capatriti 100% Pure Olive Oil,
- xvi. *Forcellati v. Hyland's, Inc.*, (C.D. Cal. Apr. 9, 2014) to represent a certified nationwide class of purchasers of children's homeopathic cold and flu remedies, and
- xvii. *Melgar v. Zicam LLC, et al.* (E.D. Cal. Oct. 29, 2014) to represent a proposed nationwide class of purchasers of homeopathic cold remedy.

SCOTT A. BORSOR

Mr. Borsor has an active civil trial practice, having won multi-million verdicts or recoveries in five of five civil jury trials since 2008. Mr. Borsor's most recent victory came in August 2013 in *Ayyad v. Sprint Spectrum L.P.*, in which he served as lead trial counsel and won a jury verdict defeating Sprint's \$1.06 billion counterclaim and securing the class's recovery of more than \$275 million in cash and debt relief.

In *Thomas v. Global Vision Products, Inc.* (2009), the jury returned a \$50 million verdict in favor of the plaintiff and class represented by Mr. Borsor. The legal trade publication VerdictSearch reported that this was the second largest jury verdict in California in 2009.

Class actions are rarely tried to verdict. Other than Mr. Borsor and his partner Mr. Fisher, we know of no lawyer that has tried more than one class action to a jury. Mr. Borsor's perfect record of five wins in five class action jury trials, with recoveries ranging from \$21 million to \$299 million, is unmatched by any other lawyer. Each of these victories was hard-fought against top trial lawyers from the biggest law firms in the United States.

Mr. Borsor graduated from the University of Texas Law School in 1996. He served as Articles Editor of the Texas Law Review, and was a member of the Board of Advocates and Order of the Coif. Prior to starting his own practice, Mr. Borsor was a litigation associate with Cravath, Swaine & Moore (1996-2000) and Chadbourne & Parke LLP (2001), where he represented large telecommunications, pharmaceutical, and technology companies in commercial litigation.

Mr. Borsor is a member of the state bars of New York, Florida, and California, as well as the bars of the United States Court of Appeals for the Second Circuit, United States Court of Appeals for the Third Circuit, United States Court of Appeals for the Fourth Circuit, United States Court of Appeals for the Sixth Circuit, United States Court of Appeals for the Ninth Circuit, United States Court of Appeals for the Eleventh Circuit, United States District Courts for the Southern and Eastern Districts of New York, United States District Courts for the Northern, Central, Southern and Eastern Districts of California, and the United States District Courts for the Southern and Middle Districts of Florida.

Representative Cases

Mr. Borsor was appointed lead or co-lead class counsel to the largest, 2nd largest, and 3rd largest classes ever certified. Mr. Borsor has represented classes including more than 160 million class members, roughly 1 of every 2 Americans. Listed below are recent cases that are representative of Mr. Borsor's practice:

Mr. Borsor negotiated and obtained court-approval for two landmark settlements in *Nguyen v. Verizon Wireless* and *Zill v. Sprint Spectrum* (the largest and 2nd largest classes ever certified). These settlements required Verizon and Sprint to open their wireless networks to third-party devices and applications. These settlements are believed to be the most significant legal development affecting the telecommunications industry since 1968, when the FCC's Carterfone decision similarly opened up AT&T's wireline telephone network.

Mr. Bursor was the lead trial lawyer in *Ayyad v. Sprint Spectrum, L.P.* representing a class of approximately 2 million California consumers who were charged an early termination fee under a Sprint cellphone contract, asserting claims that such fees were unlawful liquidated damages under the California Civil Code, as well as other statutory and common law claims. After a five-week combined bench-and-jury trial, the jury returned a verdict in June 2008 and the Court issued a Statement of Decision in December 2008 awarding the plaintiffs \$299 million in cash and debt cancellation. Mr. Bursor served as lead trial counsel for this class again in 2013 during a month-long jury trial in which Sprint asserted a \$1.06 billion counterclaim against the class. Mr. Bursor secured a verdict awarding Sprint only \$18.4 million, the exact amount calculated by the class's damages expert. This award was less than 2% of the damages Sprint sought, less than 6% of the amount of the illegal termination fees Sprint charged to class members, and ensured that the class would recover in excess of \$275 million.

Mr. Bursor was the lead trial lawyer in *White v. Cellco Partnership d/b/a Verizon Wireless* representing a class of approximately 1.4 million California consumers who were charged an early termination fee under a Verizon cellphone contract, asserting claims that such fees were unlawful liquidated damages under the California Civil Code, as well as other statutory and common law claims. In July 2008, after Mr. Bursor presented plaintiffs' case-in-chief, rested, then cross-examined Verizon's principal trial witness, Verizon agreed to settle the case for a \$21 million cash payment and an injunction restricting Verizon's ability to impose early termination fees in future subscriber agreements.

Mr. Bursor was the lead trial lawyer in *Thomas v. Global Visions Products Inc.* Mr. Bursor represented a class of approximately 150,000 California consumers who had purchased the Avacor® hair regrowth system. In January 2008, after a four-week combined bench-and-jury trial, Mr. Bursor obtained a \$37 million verdict for the class, which the Court later increased to \$40 million.

Mr. Bursor was appointed class counsel and was elected chair of the Official Creditors' Committee in *In re Nutraquest Inc.*, a Chapter 11 bankruptcy case before Chief Judge Garrett E. Brown, Jr. (D.N.J.) involving 390 ephedra-related personal injury and/or wrongful death claims, two consumer class actions, four enforcement actions by governmental agencies, and multiple adversary proceedings related to the Chapter 11 case. Working closely with counsel for all parties and with two mediators, Judge Nicholas Politan (Ret.) and Judge Marina Corodemus (Ret.), the committee chaired by Mr. Bursor was able to settle or otherwise resolve every claim and reach a fully consensual Chapter 11 plan of reorganization, which Chief Judge Brown approved in late 2006. This settlement included a \$12.8 million recovery to a nationwide class of consumers who alleged they were defrauded in connection with the purchase of Xenadrine® dietary supplement products.

Mr. Bursor was the lead trial lawyer in *In re: Pacific Bell Late Fee Litigation*. After filing the first class action challenging Pac Bell's late fees in April 2010, winning a contested motion to certify a statewide California class in January 2012, and defeating Pac Bell's motion for summary judgment in February 2013, Mr. Bursor obtained final approval of the \$38 million class settlement. The settlement, which Mr. Bursor negotiated the night before opening statements were scheduled to commence, provides for a \$20 million cash payment to provide

refunds to California customers who paid late fees on their Pac Bell wireline telephone accounts, and includes an injunction that will reduce late fee charges by \$18.6 million over 28 months.

L. TIMOTHY FISHER

Mr. Fisher has an active practice in consumer class actions and complex business litigation and has also successfully handled a large number of civil appeals. Prior to founding Bursor & Fisher, P.A. in 2011, Mr. Fisher was an associate with Bramson, Plutzik, Mahler & Birkhaeuser, LLP in Walnut Creek, California for 13 years. During his career, he has been actively involved in numerous cases that resulted in multi-million dollar recoveries for consumers and investors. Mr. Fisher has handled cases involving a wide range of issues including nutritional labeling, health care, telecommunications, corporate governance, unfair business practices and consumer fraud. With his partner Scott A. Bursor, Mr. Fisher has tried four class action jury trials, all of which produced successful results. In the initial phase of *Thomas v. Global Vision Products*, the jury awarded the plaintiff class more than \$36 million plus punitive damages, while the Court awarded a \$40 million recovery on separate legal claims. In a subsequent phase of the trial against individual defendants, Mr. Fisher and Mr. Bursor obtained a jury award of \$50,024,611 – the largest class action award in California in 2009 and the second-largest jury award of any kind.

Mr. Fisher was admitted to the State Bar of California in 1997. He is also a member of the bars of the United States Court of Appeals for the Ninth Circuit and the United States District Courts for the Northern, Central, Southern and Eastern Districts of California. Mr. Fisher taught appellate advocacy at John F. Kennedy University School of Law in 2003 and 2004. Recently, Mr. Fisher contributed jury instructions, a verdict form, and comments to the consumer protection chapter of Justice Elizabeth A. Baron's *California Civil Jury Instruction Companion Handbook* (West 2010). In 2014, Mr. Fisher was appointed to a four-year term as a member of the Standing Committee on Professional Conduct for the United States District Court for the Northern District of California.

Mr. Fisher received his Juris Doctor from Boalt Hall at the University of California at Berkeley in 1997. While in law school, he was an active member of the Moot Court Board and participated in moot court competitions throughout the United States. In 1994, Mr. Fisher received an award for Best Oral Argument in the first year moot court competition. In 1992, Mr. Fisher graduated with highest honors from the University of California at Berkeley and received a degree in political science. Prior to graduation, he authored an honors thesis for Professor Bruce Cain entitled "The Role of Minorities on the Los Angeles City Council." He is also a member of Phi Beta Kappa.

Representative Cases

- *Thomas v. Global Vision Products, Inc.* (Alameda County Superior Court) - Mr. Fisher litigated claims against Global Vision Products, Inc. and other individuals in connection with the sale and marketing of a purported hair loss remedy known as Avacor. The case lasted more than seven years and involved two trials. The first trial resulted in a verdict for plaintiff and the class

in the amount of \$40,000,000. The second trial resulted in a jury verdict of \$50,024,611, which led to a \$30 million settlement for the class.

- *In re Cellphone Termination Fee Cases* - Handset Locking Actions (Alameda County Superior Court). Mr. Fisher actively worked on five coordinated cases challenging the secret locking of cell phone handsets by major wireless carriers to prevent consumers from activating them on competitive carriers' systems. Settlements have been approved in all five cases on terms that require the cell phone carriers to disclose their handset locks to consumers and to provide unlocking codes nationwide on reasonable terms and conditions. The settlements fundamentally changed the landscape for cell phone consumers regarding the locking and unlocking of cell phone handsets.
- *In re Cellphone Termination Fee Cases* - Early Termination Fee Cases (Alameda County Superior Court and Federal Communications Commission). In separate cases that are a part of the same coordinated litigation as the Handset Locking Cases, Mr. Fisher actively worked on claims challenging the validity under California law of early termination fees imposed by national cell phone carriers. In one of those cases, against Verizon Wireless, a nationwide settlement was reached after three weeks of trial in the amount of \$21 million. In a second case, which was tried to verdict, the Court held after trial that the \$73 million of flat early termination fees that Sprint had collected from California consumers over an eight-year period were void and unenforceable.
- *Guyette v. Viacom, Inc.* (Alameda County Superior Court) - Mr. Fisher was co-counsel for a class of cable television subscribers who alleged that the defendant had improperly failed to share certain tax refunds with its subscribers. A settlement was negotiated shortly before trial under which defendants paid the class \$13 million in cash.
- *In re Haier Freezer Consumer Litigation* (Northern District of California) - Mr. Fisher filed the case in June 2011 and alleged that Haier had misrepresented the energy consumption of its HNCM070E freezer on the ENERGYGUIDE labels attached to the freezers. After two years of litigation, District Judge Edward J. Davila approved a nationwide settlement valued at \$4 million, which provides for cash payments of between \$50 and \$325.80 to class members who purchased the Haier HNCM070E chest freezer.

Selected Published Decisions

- *In re Cellphone Termination Fee Cases*, 186 Cal.App.4th 1380 (2010)
- *In re Cellphone Termination Fee Cases*, 180 Cal.App.4th 1110 (2009)
- *Gatton v. T-Mobile USA, Inc.*, 152 Cal.App.4th 571 (2007)

JOSEPH I. MARCHESE

Mr. Marchese is a Partner with Bursor & Fisher, P.A. Mr. Marchese focuses his practice on complex business litigation and consumer class actions. Prior to joining Bursor & Fisher, Mr. Marchese was an associate with DLA Piper and Shearman & Sterling where he litigated complex

commercial matters on behalf of investment banks, pharmaceutical companies, insurance carriers, food manufacturers, and tobacco companies.

Mr. Marchese is admitted to the State Bar of New York and is a member of the bars of the United States District Courts for the Southern District of New York and the Eastern District of New York, as well as the United States Court of Appeals for the Second Circuit.

Mr. Marchese graduated from Boston University School of Law in 2002 where he was a Member of The Public Interest Law Journal. In 1998, Mr. Marchese graduated with honors from Bucknell University where he earned a B.S.B.A.

Representative Cases

- *Rossi v. The Procter & Gamble Co.* (District of New Jersey) – Mr. Marchese filed the first nationwide consumer class action lawsuit alleging Crest Sensitivity Treatment & Protection toothpaste (“CSTP”) was not effective as advertised, and was essentially identical to an existing brand called Crest Pro-Health toothpaste, with only three differentiating features: (1) claims of rapid relief for tooth sensitivity on the product packaging; (2) a different coloring additive; and (3) a 75% price premium over Crest Pro-Health. The plaintiff defeated defendant’s motion to dismiss before negotiating a settlement with P&G. District Judge Jose L. Linares granted final approval of the nationwide class settlement which provides class members with a monetary refund of at least \$4.00 per tube of CSTP.
- *In Re Michaels Stores Pin Pad Litigation* (Northern District of Illinois) – Mr. Marchese filed the first nationwide consumer class action against Michaels Stores concerning a data breach that resulted in the unauthorized release of customers’ financial data. He actively litigated claims that Michaels failed to secure customer personal financial data appropriately, and failed to provide adequate notice to its customers whose information and funds were stolen as a result of the breach at 86 Michaels stores across the country. After two years of litigation, District Judge Thomas M. Durkin approved a nationwide settlement that requires Michaels to create a monetary fund from which class members could receive full reimbursement for monetary losses arising from the data breach. Also, every settlement class member was entitled to credit monitoring services for early detection of identity theft and credit fraud. As part of the settlement Michaels also verified that it had implemented strict new security measures to protect its customers from similar data breaches in the future.
- *Cox et al. v. Clarus Marketing Group, LLC et al.* (Southern District of California) – Mr. Marchese actively litigated claims for a nationwide class of online shoppers who made purchases on Provide-Commerce websites and who were deceptively enrolled in an online service, Freeshipping.com, for which they were charged unauthorized membership fees. The plaintiffs alleged that they were secretly enrolled in a “Freeshipping” rewards program using the aggressive Internet marketing practice known as “data pass,” where Provide-Commerce engaged in the unauthorized sharing and charging of customers’ billing information with a third-party vendor. After more than two years of litigation, District Judge Marilyn L. Huff approved a nationwide settlement valued at over \$2.65 million, which included monetary reimbursement to settlement class members for their unauthorized membership charges.

Selected Published Decisions

- *In re Michaels Stores Pin Pad Litig.*, 830 F. Supp. 2d 518 (N.D. Ill. 2011) (denying motion to dismiss in data breach consumer class action)
- *In re Scotts EZ Seed Litig.*, No. 12 CV 4727, 2013 U.S. Dist. LEXIS 73808 (S.D.N.Y. May 22, 2013), 2013 WL 2303727, UCC Rep. Serv. 2d 935 (S.D.N.Y. May 22, 2013) (denying motion to dismiss in false advertising consumer class action against grass seed manufacturer)
- *Rossi v. The Procter & Gamble Co.*, No. 11-cv-7238, 2013 WL 5523098 (D.N.J. Oct. 3, 2013) (denying motion to dismiss in false advertising consumer class action against maker of Crest toothpaste)
- *Ebin v. Kangadis Food Inc.*, --- F.R.D.---, 2014 WL 737960 (S.D.N.Y. Feb. 25, 2014) (certifying nationwide class of purchasers of purported “100% Pure Olive Oil” in false advertising consumer class action against edible oil distributor)

NEAL J. DECKANT

Neal J. Deckant is an Associate with Bursor & Fisher, P.A. Mr. Deckant focuses his practice on complex business litigation and consumer class actions. Prior to joining Bursor & Fisher, Mr. Deckant counseled low-income homeowners facing foreclosure in East Boston.

Mr. Deckant is admitted to the State Bar of New York and is a member of the bars of the United States District Courts for the Southern District of New York and the Eastern District of New York.

Mr. Deckant received his Juris Doctor from Boston University School of Law in 2011, graduating *cum laude* with two Dean’s Awards. During law school, Mr. Deckant served as a Senior Articles Editor for the Review of Banking and Financial Law, where he authored two published articles about securitization reforms. In 2007, Mr. Deckant graduated with Honors from Brown University with a B.A. in East Asian Studies and Philosophy.

YITZCHAK KOPEL

Yitzchak Kopel is an Associate with Bursor & Fisher, P.A. Mr. Kopel focuses his practice on complex business litigation and consumer class actions.

Mr. Kopel is admitted to the State Bars of New York and New Jersey and is a member of the bars of the United States District Courts for the Southern District of New York, Eastern District of New York, and District of New Jersey.

Mr. Kopel received his Juris Doctor from Brooklyn Law School in 2012, graduating *cum laude* with two Dean’s Awards. During law school, Mr. Kopel served as an Articles Editor for the Brooklyn Law Review and worked as a Law Clerk at Shearman & Sterling. In 2009, Mr. Kopel graduated *cum laude* from Queens College with a B.A. in Accounting.

ANNICK M. PERSINGER

Annick M. Persinger is an Associate with Bursor & Fisher, P.A. Ms. Persinger focuses her practice on complex business litigation and consumer class actions. Prior to joining Bursor & Fisher, Ms. Persinger worked as a legal research attorney for Judge John E. Munter in Complex Litigation at the San Francisco Superior Court.

Ms. Persinger is admitted to the State Bar of California and the bars of the United States District Courts for the Northern District of California, Central District of California, Southern District of California, and Eastern District of California.

Ms. Persinger received her Juris Doctor from University of California, Hastings College of the Law in 2010, graduating *magna cum laude*. During law school, Ms. Persinger served as a member of Hastings Women's Law Journal, and authored two published articles. In 2008, Ms. Persinger received an award for Best Oral Argument in the first year moot court competition. In 2007, Ms. Persinger graduated *cum laude* from University of California, San Diego with a B.A. in Sociology, and minors in Law & Society and Psychology.

FREDERICK J. KLORCZYK III

Frederick J. Klorczyk III is an Associate with Bursor & Fisher, P.A. Mr. Klorczyk focuses his practice on complex business litigation and consumer class actions.

Mr. Klorczyk is admitted to the State Bars of New York and New Jersey and is a member of the bars of the United States District Courts for the Southern District of New York, Eastern District of New York, and District of New Jersey.

Mr. Klorczyk received his Juris Doctor from Brooklyn Law School in 2013, graduating *magna cum laude* with two CALI Awards for the highest grade in his classes on criminal law and conflict of laws. During law school, Mr. Klorczyk served as an Associate Managing Editor for the Brooklyn Journal of Corporate, Financial and Commercial Law and as an intern to the Honorable Alison J. Nathan of the United States District Court for the Southern District of New York and the Honorable Janet Bond Arterton of the United States District Court for the District of Connecticut. In 2010, Mr. Klorczyk graduated from the University of Connecticut with a B.S. in Finance.

YEREMEY O. KRIVOSHEY

Yeremey O. Krivoshey is an Associate with Bursor & Fisher, P.A. Mr. Krivoshey focuses his practice on complex business litigation and consumer class actions.

Mr. Krivoshey is admitted to the State Bar of California and is a member of the bars of the United States District Courts for the Northern, Central, Southern and Eastern Districts of California.

Mr. Krivoshey received his Juris Doctor from New York University School of Law in 2013, where he was a Samuel A. Herzog Scholar. During law school, Mr. Krivoshey worked as

a Law Clerk at Vladeck, Waldman, Elias & Engelhard, P.C. Mr. Krivoshey also interned at the United States Department of Justice and the American Civil Liberties Union. In 2010, Mr. Krivoshey graduated *cum laude* from Vanderbilt University.

JULIA A. LUSTER

Julia A. Luster is an Associate with Bursor & Fisher, P.A.

Ms. Luster is admitted to the State Bar of California and is a member of the bars of the United States District Courts for the Northern, Central, Southern, and Eastern Districts of California. She is also admitted to the United States Court of Appeals for the Ninth Circuit.

In 2013, Ms. Luster received her Juris Doctor from UC Davis School of Law. While attending UC Davis, Ms. Luster externed with the Honorable Judge Arthur L. Alarcón of the United States Court of Appeals for the Ninth Circuit. She was a Senior Articles Editor for the UC Davis Law Review and a top 10 oral advocate in appellate advocacy. She also participated in the Moot Court interschool competition team. Ms. Luster worked at both the UC Davis Prison Law Clinic and UC Davis Civil Rights Clinic. While at the Civil Rights Clinic, she co-authored a Ninth Circuit brief for an appeal she subsequently argued and won. Prior to law school, Ms. Luster received her B.A. in English from UCLA and her M.A. in English and Comparative Literature from Columbia University.